



THE AUSTRALIAN

Garden journal

OFFICIAL JOURNAL OF THE AUSTRALIAN GARDEN HISTORY SOCIETY

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FRONT COVER:

VAUCLUSE HOUSE - view from Vacluse Bay,

by Conrad Martens, 1840.

(reproduced by permission of The Mitchell Library)

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Contributors to this issue

Marion French and her husband Frank purchased a neglected citrus orchard of two and a half hectares, with a dilapidated house in the middle of it on the edge of a quiet valley at Kincumber, on the Central Coast of N.S.W., about six years ago. The house was painstakingly restored, the land cleared of lantana to become The Lavender Patch, a nursery specialising in lavender and other perfumed plants.

Barry Blyth with his wife Lesley run Tempo Two Nursery, at Ellinbank in Victoria. He has been hybridizing iris for the past twenty years, and is one of the foremost breeders in Australia. Some 1200 varieties of iris are grown at Tempo Two, with about 200 new varieties being imported each year. New varieties raised there are catalogued by more than twenty nurseries in America and Europe.

Dorothy Downes lived in Russia for four years, while her husband was seconded to the Australian Embassy in Moscow from the CSIRO, and has travelled extensively in eastern Europe. She now lives in Dundas, an outer Sydney suburb.

Elizabeth Richards is a volunteer guide at Vacluse House, with a particular interest in the gardens. She is also a member of the Committee of the Friends of Vacluse House.

Greg Keighery is Botanical Research Officer at King's Park and Botanic Gardens (Western Australia's State Botanic Gardens). The gardens are a mixture of Victorian, Modern and managed bushland in the centre of Perth. The major aim is to cultivate the local flora and Greg is involved in studying the biology (distribution, habitats, pollination, etc.) of these plants. His other interest is the origin and spread of weeds (some of which originate in our gardens) for which there is little local information.

Trevor Nottle is interested in combining a wide variety of plants in a cottage garden setting. He is an avid collector of all kinds of hardy perennials and bulbs, raising many from seed; he also maintains a wide correspondence with plantsmen (and women) around the world. At present he is collecting Clematis and other light climbers. His library contains over two thousand books and periodicals, and he also collects old photographs and prints of gardens. One of his specialities is species and old fashioned roses, and his book 'Growing old-fashioned roses in Australia' will be published by Kangaroo Press later this year.

Conserving our Garden Plants

The conservation of cultivated plants becomes a matter of increased urgency every year, as the genetical diversity that has been built up over centuries, both by natural selection and by human agency, is whittled down to the lowest common denominator of economically viable types.

Professor William Stearn, who will be coming to Australia later this year for a lecture tour sponsored by the Australian Garden History Society, spoke of this when he gave his Masters Memorial Lecture to the Royal Horticultural Society in London back in 1965; he said "The extinction of the old, varied, economically inferior cultivars and their replacement by a much smaller number of more uniform cultivars may lead to a situation where there are no genetical reserves in store ...". More recently Dr Edward O. Wilson, of Harvard University, had this to say "The worst thing that can happen will happen, in the 1980's ... not energy depletion, or economic collapse, or limited nuclear war, but the loss of genetic diversity, the folly our descendants are least likely to forgive us".

We give some prominence in this issue to the work in England of the National Council for the Conservation of Plants and Gardens (NCCPG), particularly its work in establishing national reference collections. Though its achievements to date are fairly modest, it is a model of what can, and what should be done.

There are, of course, other organizations in other countries with a similar involvement; for example in the U.S. the Department of Agriculture's National Plant Germplasm System is building up at least twelve genetic stock repositories.

While we do not have, in this country, the same human or financial resources as exist in England and the U.S., the urgency is, I suggest, at least equal. There is a growing awareness among the gardening public, not just of the inherent charm and beauty of 'old-fashioned' plants, but of the importance of conserving as many as possible. Several voluntary organizations, like Heritage Roses, are playing a very positive and valuable role, but the problem is too important by far to be left to the uncoordinated efforts of voluntary organizations. The NCCPG was born out of a getting-together of some one hundred different organizations - Botanic Gardens, Parks Departments of local authorities, the RHS, specialist plant societies, nurserymen's associations, and so on; as such it is an example of what can be achieved by a combination of public and private enterprise.

The Australian Garden History Society has taken the initiative by establishing a Plant Resources Panel. I hope that this is but a beginning, and that this Panel will be supported, perhaps in time augmented, by all interested bodies and individuals.

TIM NORTH

The N.C.C.P.G. National Reference Collections

The National Council for the Conservation of Plants and Gardens (N.C.C.P.G.) was established in England a few years ago to co-ordinate the task of conserving valuable garden plants that were in danger of being lost to cultivation.

The National Reference Collections set out to gather together in one place all representatives of a particular group of plants that are still in cultivation, for the purpose of research, information and propagation, in a way which will aid anyone seeking to study them further.

Agreement has been reached between the N.C.C.P.G. and a wide variety of interested organizations and private individuals including Botanic Gardens, local authorities, colleges of education, National Trusts and nurseries, to house (at the time of writing) sixty-one national reference collections.

Ideally these reference collections will be based on already existing and reasonably representative collections which their owners are prepared to expand. In some cases there may be parallel or complimentary collections, and some measure of duplication may in fact be desirable.

Owners of collections are asked to endeavour to keep their plants in good health (a minimum number of each) and to add to the collection or improve it. It is important that they maintain accurate records of the plants in the collection and map the individual plants or plant groups involved; a photographic and herbarium record is also envisaged. The owner is asked to submit a brief annual report on any changes that have occurred during the year. In return for this minimal surveillance they will be offered help and advice to enable them to obtain the desiderata of their particular group, so that the collection may be gradually enlarged. Each collection will be checked to make sure that the

plants have been correctly identified; these can be used to check the identification of plants from other sources.

Some process of selection will be necessary as it will not be possible to preserve everything. Criteria which can be taken into account in making such selection include the plant's historical value, how, for example, it helps to explain and illustrate the line of development from the original wild ancestor; its genetic importance as a source of potentially useful characteristics; and its inherent garden merit.

It is hoped that all holders of national reference collections will be able to maintain details of current commercial sources for the plants in their collections, but the stock in the collection can act as a reservoir of material from which plants may be propagated; holders of collections, however, reserve the right to restrict the amount of propagating material they make available and they may make a charge for what they provide.

The N.C.C.P.G. hopes that it may be possible to get the majority of genera of flowering trees and shrubs allocated in this way, but the cultivation of non-woody plants is generally more labour-intensive and there may therefore be less co-operation from public bodies and a greater need to rely on dedicated amateurs. Some plants may have to be dispersed in several collections, in the gardens of a number of people.

The N.C.C.P.G. would prefer collections to be open to the public or to be sufficiently accessible so as to allow individuals or groups with a particular interest to visit the collections.

Only a few of these collections have yet progressed to the stage of being comprehensive, but an encouraging start has been made.

(adapted from an article in "The Garden", Dec. 1982, by Ruth Stungo, Organizing Secretary of the N.C.C.P.G.'s London group.)

Letters

From The National Council for the Conservation of Plants and Gardens, Wisley Gardens, Woking, Surrey GU23 6QB, England.

Dear Mr North,

Thank you very much for your letter of the 10th March. I am happy to enclose for you some papers about the work of the NCCPG, which I hope will be of some interest and use to you. At its last meeting the National Council discussed the possibility - in this, or in other countries - of establishing a formal liaison with related organizations working in the same field involving a regular exchange of literature but without recourse to payment of any subscription; in other words such organizations would be Associated rather than Affiliated. I wonder whether the Australian Garden History Society would be interested in seeking such formal Association.

We are fortunate in this country in having a wide variety of specialist Horticultural Societies, some of which have already started to co-ordinate action on the conservation of the plants which fall within their sphere of interest.

However, I hope that, through the work of the NCCPG, we are beginning to stimulate a wider realisation of the need for conservation of garden plants and to suggest ways in which this can be achieved - through the establishment of local Groups of keen plantmen who can locate rare plants, and then take appropriate action to propagate and distribute them; and through the establishment of the scheme of National Collections, whereby different individuals or organizations can take responsibility for maintaining Collections of a particular genus or groups of plants.

So far as the conservation of gardens is concerned, this seems to be an even more interminable problem than is the question of garden plants. We are hoping to co-operate with the new

Research Centre which has been formally set up just recently at York, where information that other bodies already active in this field (e.g. the British Garden History Society) or that we ourselves collect may be collated and put towards the development of a national Inventory - and in time a Register - of important gardens in this country.

Hugh Johnson, who writes the Tradescant column in 'The Garden', is in fact a member of the National Council itself, so, while with due modesty I hope we are making some headway, I think that such modesty prevents me from agreeing fully with the hyperbole with which he describes our successes to date!

Yours sincerely,

Duncan Donald,

Horticultural Taxonomist NCCPG

Editor's Note

A full list of the National Reference Collections established to date and their locations is available from P.O. Box 279, Edgecliff, N.S.W. 2027, for \$1.50 including postage. N.C.C.P.G. 'Pink Sheets' (search lists for rare garden plants) will also be available as they are received, for \$1.00 each.

"Pink Sheet No 2" (May 1982) for example, lists:

85 species, hybrids and cultivars reported as 'Found'. i.e. they are known to be in cultivation in at least one garden in the British Isles, and in a few cases in a nursery. Most of these, however, are still in danger of being lost.

71 ditto "Still Wanted", i.e. they have not yet been reported, and therefore appear to be extinct in cultivation in the British Isles.

281 ditto "First time additions" to the "Pink Sheet", i.e. information on their possible whereabouts is requested.

The Miner's Cottage Garden, East Moonta, South Australia

by Trevor Nottle

*based on talks and correspondence with the garden's creator
Mrs Mary Ferguson.*

photography by Mr Graham Proust.

Few people visiting Moonta today would be able to visualise how much larger the town once was. There is ample evidence in the town's many substantial stone buildings that it was once a centre of some importance, however little remains of the hundreds of miner's cottages which were built by the Cornish copper miners and it is not easy to visualise the village landscapes which once existed in the residential areas outside the town limits.

Place names such as East Moonta, Yelta and Moonta Mines marked now by decaying Methodist Chapels, fragments of limestone walls and scattered cottages were in the 1880's thriving communities supporting fine choirs, pigeon fanciers and proud pastry makers! Picnic races and horticultural shows were keenly supported by residents of the three copper mining centres on Yorke Peninsula - Kadina, Moonta and Wallaroo and fine Show Grounds and ovals were erected by the prosperous communities. All this passed away with slumps in the copper trade and a decline in the quality and quantity of ore being mined.



THE FRONT GARDEN LOOKING DOWN THE CROSS PATH TO THE N.E.

As the miner's settlements were built on Crown Land under 99 year lease arrangements the cottages had to be demolished as they were vacated when the miners and their families departed. Up until the 1950's there were a good many cottages still inhabited and kept up as family homes by local residents.

Today most of the remaining cottages are used as vacation homes; the change of occupancy and usage bringing about changed approaches to maintenance and local features. Gone is the lucerne patch, now that there is no need for green-feed for the cow, the poultry and the pigeons. No longer do massive trombone and pumpkin vines grow out from carefully tended hillocks. Neither are there neatly bent over rows of onions, nor any tomatoes grown in tin cans sunk into the ground to keep the precious water where it's needed most.

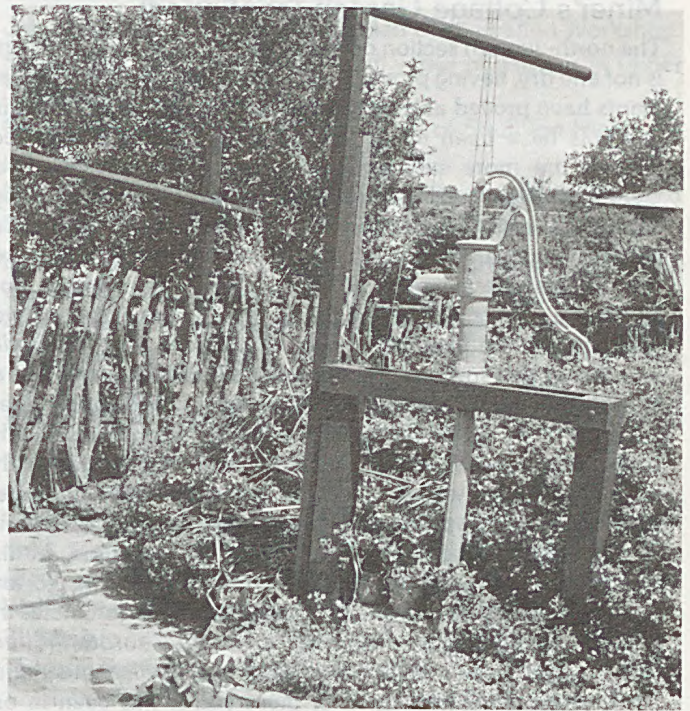
We find only parched, dusty geraniums, aloes and oleanders to show us that once gardens were made here - the prune tins jammed with rough sword-ferns and maiden-hair have entirely disappeared. The cottage culture of these Cornish miners has passed away but fortunately one person has been able to rebuild part of this culture by her reconstruction of a cottage garden in the garden space around a miner's cottage at East Moonta, now owned by the National Trust.

Beginning in 1966, and working mostly alone, Mary Ferguson has made an authentic construction of the gardens of her childhood spent in Moonta. The worth of her efforts has been recognised by this garden being included in the Historic Gardens Survey - the only garden made in recent time, yet considered authentic for the period around the turn of the century and the only working class cottage garden included in the survey.

Such architectural feature which exist are simple and made from whatever materials were available to the poor but inventive miners and their descendents. Fences were constructed from wattle sticks held together by inter-weaving them with several strands of wire strung between corner posts; sometimes a picket fence and gates were added to the main boundary but many had to content themselves with 4 gallon drums cut open and flattened and made into a fence, and others resorted to hedges of boxthorn or *Aloe arborescens*. Even old cast iron bed frames and heads were used, the latter being particularly useful for making gates that did not sag or buckle.

Paving was usually constructed from the purple green stone taken from the mine during operations. It was cemented in lime mortar which in this dry area lasted well. Broken bricks were also used to make short pieces of pavement and sometimes to edge garden areas, though a more commonly used edging material was timber strips held in place by wooden pegs driven into the ground. 'Skimps', the fine rusty gravel from the mine crushers were freely available and widely used to pave the larger areas between the cart sheds, stables, chaff rooms, laundry, poultry houses and milking sheds.

Common features of many cottage gardens were horse troughs and drinking tanks for cows. These were often old rain-water tanks cut down to about half size and put to another use. Sometimes other uses were found for these water storages; the author remembers his grandmothers cow tank as being home to a small school of bread-crumbs fed goldfish and a clump of creamy-white waterlilies. These could scarcely be claimed as water features but were still very common necessities in the majority of miners' gardens where subsistence mixed-husbandry went a long way to stretching low wages. At the Miner's Cottage the only structures along these lines are the familiar corrugated iron tank and a larger circular underground tank made from local



OUTSIDE THE MAIN ENTRANCE TO THE KITCHEN STANDS THE DOUGLAS HAND PUMP.

stone cemented and made smooth. As was usual this tank is roofed over to keep it safe from contamination, to keep children from falling in and to provide another catchment area for the precious rain that fell.

The physical layout of the garden seems at first very odd, with paths and gates that lead nowhere in particular. When you remember how many houses there once were it becomes obvious that once they led the way to short cuts across the open land between the clusters of houses, to the school, to the church and to the pit-heads and mine surface buildings. Layout was more than likely also affected by the lay of the land and the need to sit the house where roof drainage could be led easily to a storage at the low point of the land. As the miners' cottages were frequently partially sunk into the ground the house was also sited where excavation could be most easily done.

The front of the house faces South-East and here is a small but very formal garden with brick paved paths leading from the gate to the front door and an intersecting path which crosses the garden parallel to the front. The beds contain a mixed planting of Cabbage Roses, Fuchsias, Viburnum, Lavender with a Bignonia growing on the fence and an underplanting of Jonquils and Violets. At the end of the garden, small fences separate the front garden from the rest. While this is the Front Garden it is not the main garden, nor is it the main entrance. This is to be found on the western side of the house adjacent to the back door and including the underground tank and pump - the social centre of the dwelling. There is a substantial area of brick paving between the back door, the pump and the back gate and this is planted around with Pelargonium x Scarlet Pet; the fences being covered with an assortment of creepers including *Jasminum polyanthum*, *Solanum azureum*, Ivy, pink Tecoma and climbing geraniums. The small garden area between the front and the back, occupying the south-western corner has a candle pine, a large nectarine tree - grown from a stone by the thrifty gardener, and a Spanish Broom underplanted with a variety of old flag Iris (German iris).

Miner's Cottage Garden (continued)

The north-western section of the garden runs up a slight hill and is hot and dry, having proved a difficult task for the restorer. Few plants have proved able to withstand the conditions and many attempts have been made to get suitable plants established. Among the more successful have been Tea roses such as General Gallieni and Mme. Lambard. Hardy lavender, small pig-face succulents (*Mesembryanthemum spp*) in yellow and orange, Gazania, Pride of Madeira (*Echium spp*) and several of the old Oak-leaved geraniums have been among the most successful plants. Towards the northern boundary natives predominate the planting among which are *Acacia iteaphylla* and *Melaleuca* species. There are also such hardy stand-by's as Lantana, Oleander and the blue daisy Felicia. In the bed nearest the house are a variety of Hollyhocks, bulbs, Nasturtiums and the sub-shrub blue Statice. Progressing through the garden to the northern corner we can see the sundial which has been surrounded by low plantings of Iris (tall bearded sorts), Gazania, Freesias, Gaillardias, spring bulbs and Nasturtiums. In the background are Choysia, Escalonia, Lonicera, Plumbago and Acanthus. A large White Cedar - *Melia azardrach* dominates the garden here and the tree lavender - *Lavandula abrotanifolium* and the grey leaved giant woody perennial *Melianthus major* make unusual accents. Each of these plants has been in our gardens for a long time and were especially valued for their hardy qualities. At the rear of this area, adjacent to a large paved area outside the kitchen is an old-fashioned clothes line made of three-strand wire propped up by several forked branches about 10ft high which have been cut from the mallee scrub surrounding the area. A tea rose Papa Gontier is also a special feature of the garden now the clothes line.

Situated between the kitchen door and the clothes line is the outdoor laundry, a large copper tub set in a cement and rubble support with room to light a fire underneath. In the cottage I knew the fuel was cow pats' gathered by the children from the

common land around the houses. As wood was such a scarce item it was usually kept for burning in the wood stove in the kitchen. Besides the cow 'pats', when dry, burned slowly and evenly providing the right pace of burning in the open fire under the copper.

In the south-eastern corner of the garden a large path leads easterly to a set of double gates; towards the boundaries of the garden the planting is mostly trees and shrubs, particularly wattles, large rock-roses, Lantana and Plumbago. Nearer to the house the underplanting adds a greater variety to the scene, especially the dwarf and variegated forms of Agapanthus, and the massed plantings of One O'Clocks (*Oxalis hirta*), Autumn Crocus (*Sternbergia lutea*), Silene and the ever present Jonquils. Passing along the path which runs parallel with the house a circuit of the garden is completed on reaching the front garden again along a path which is lined with violets, pinks (*Dianthus* hybrids), rock-roses (*Cistus*), Plumbago and Chinese Lantern (*Abutilon*). There are also plants of Joe-Pie Weed (*Eupatorium*) and Marvel of Peru (*Mirabilis jalapa*) and frequent self-sown Sweet Alyssum.

The entire block is dominated by the 'skimps' dumps from the copper mines and by the native She-oak and Mallee scrub which would have been present in the 1880's. Which-ever direction from the garden one looks, the scene must be much as it was when the area was in its hey-day. The rich and varied plantings of the cottage garden helping to recreate that cosy feeling of homeliness which is generally accepted as being peculiar to cottage gardens. The plants in themselves are thought of individually as being the commonest sorts but have been put together in such a way as to make the whole garden a place of rare charm and great visual interest. Everything grows in profusion and common old-fashioned plants such as Geraniums, Lavender, Violets, Jonquils, Nasturtium and Roses continuously repeated in the plantings stress the Essentials of cottage gardening: vibrant colour, a continuous display, hardy perennials, bulbs and self-sowing annuals combined in an informal mixture within a more or less formal framework of paths, and usually developed on a base of practical necessity rather than aesthetic niceties.

"The most significant feature of this garden is that it provides a valuable perspective of a style of cottage gardens which existed in South Australia prior to the introduction of extensive areas of lawn into the rural and suburban garden. This garden is particularly important from a historic viewpoint as it makes available to the younger generation an example of this type of garden. This is significant because small gardens are readily changed and few cottage gardens of the late 1800's have survived as have some of the larger gardens of the period".

Beames, R. & Whitehill, J.A.E.
Some Historic Gardens In South Australia

FOOTNOTE: The Use of Native Trees in the Garden - Some readers may question whether it is appropriate to use native trees and shrubs in the restoration of a nineteenth century cottage garden. Ample evidence of the popularity of natives in the late 1800s may be found in almost any nursery catalogue of the period - E. & W. Hackett's catalogue for 1890 contains seven close-typed pages of native plant seed as well as plants from thirty-three genera, covering trees, shrubs, annuals, climbers and bulbs. Similar lists may be found in other South Australian nursery catalogues of the time, e.g. C.F. Newman & Son, E.B. Heyne & Co and Henry Sewell (the Payneham Nursery).

FROM THE REAR OF THE KITCHEN A VIEW PAST THE SUNDIAL TO THE N.E. 'SKIMPS' DUMP IN THE BACKGROUND.



THE AUSTRALIAN GARDEN HISTORY SOCIETY

Patron: Dame Elisabeth Murdoch, D.B.E.

Chairman of Executive Committee: Mr Howard Tanner

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3 Pine Street, Randwick, NSW, 2031.

All correspondence should be addressed to the Secretary.

Subscriptions

All members who have not renewed their subscriptions for the current year are asked to do so as soon as possible. No reminder notices will be posted, and any subscription not renewed by 1st October will be deemed to have lapsed.

Change of address

Any change of address, or an incorrect address as shown on Journal mailing labels, should be notified to the Secretary with as little delay as possible, so that records can be corrected.

The Tradescant Trust

The Tradescant Trust held a party at its premises at Little Boltons, London SW1, on 26th May last, at which Her Majesty Queen Elizabeth and the Queen Mother were present. The Australian Garden History Society received an invitation to this function, and was represented by Miss Margaret Stones, M.B.E.

Back Numbers of A.G.H.S. Journals

Before the amalgamation with "The Australian Garden Journal" the A.G.H.S. published four Journals, viz. No 1 (Spring 1980), No 2 (Winter 1981), No 3 (Summer 1982) add No 4 (Spring 1982).

Back numbers of Nos 1, 2 and 3 (but not of No 4) are still available, price \$2 each, plus 20c postage. All requests for these back numbers should be sent to P.O. Box 300, Edgecliff, NSW, 2027, and accompanied by the appropriate remittance, made out to the A.G.H.S.

State News

New South Wales

The following is the provisional programme of activities up to the end of 1984.

Saturday 27th August - visits to bushland gardens in the Manly-Warringah area, including Katandra Bushland Sanctuary.

Saturday 1st to Monday 3rd October - Canberra weekend (in conjunction with A.C.T. branch); to include visits to Duntroon, The Lodge, Yarralumla, Cuppacumbalong and Lanyon; also a film show on the Saturday evening.

October 1983 (date to be fixed) - visits to significant gardens in the Sydney area constructed during the past twenty years.

Tuesday 15th November - lecture, in conjunction with other interested organizations, by Professor W.T. Stearn; probable venue The Australian Museum.

Wednesday 16th November - Annual Party in the Kiosk of the Royal Botanic Gardens, to include a short talk by Professor Stearn - 5.30 p.m. to 8.00 p.m.

April 1984 (date to be fixed) - visit to gardens in the Windsor-Kurrajong area, and to the Royal Botanic Gardens Annexe at Mount Tomah.

June 1984 (date to be fixed) - tour of churchyards and

cemeteries in the Sydney area.

July 1984 (date to be fixed) - Garden Conservation Workshop.
September 1984 (date to be fixed) - tour of gardens in upper North Shore area.

October 1984 (date to be fixed) - tour of Southern Highlands gardens.

November 1984 (date to be fixed) - Harbour Cruise - 'Use and Abuse of our Foreshore' - and Christmas Party.

Further details of all these functions will be notified to all members in due course.

Visitor Centre, Royal Botanic Gardens, Sydney

When the Premier of New South Wales, Neville Wran, officially opened the new Building Complex at the Royal Botanic Gardens, Sydney last November, a new Herbarium was not the only gain. The construction of the Robert Brown Building allowed the relocation of the National Herbarium of New South Wales into larger premises, hence freeing the old Herbarium Building for the Charles Moore Visitor Centre, the J.H. Maiden Theatre, the Gardens Shop and offices.

Charles Moore and Joseph Henry Maiden are both celebrated past Directors of the Gardens. The former was Director for an extraordinary 48 years (1848-96) during which time he travelled widely collecting plants for the Gardens' collection, including the basis of the magnificent Palm Grove. Joseph Henry Maiden succeeded Charles Moore as Director, setting the Gardens on a new level of achievement, particularly with regard to its scientific basis. He managed to secure some of the earliest Australian herbarium collections, including specimens collected in 1770 by Banks and Solander.

The Visitor Centre is appropriately situated in an area formerly occupied by the Museum of the old Herbarium, built in 1898 and named in Moore's honour. It is now the venue for semi-permanent exhibitions and the Gardens Shop. It also acts as the starting point for free guided walks on Wednesdays and Fridays at 10 a.m., as well as a distribution point for information and the self-guided walk leaflets which include the four Seasonal Walks, the Heritage Walk and the Rainforest Walk. The J.H. Maiden Theatre is used as a venue for films, meetings and seminars.

The exhibition currently on display in the Visitor Centre is called 'Gardens Spectrum' and outlines the many facets of work carried out at the Royal Botanic Gardens. This will be replaced in September by an exhibition on botanical illustration featuring originals and prints on display and for sale. The Opening of this exhibition will coincide with the beginning of Gardens Week (23rd - 30th September) during which the Gardens will offer the public flower shows, guided walks, seminars and other related activities.

The Visitor Centre, Gardens Shop and Maiden Theatre are all within close proximity of each other, attached to the Robert Brown Building (National Herbarium of New South Wales). The Gardens Shop sells books and booklets specializing in botany and horticulture, posters, prints, hand-made cards, souvenirs and plants.

The Visitor Centre and Gardens Shop are open Tuesday - Friday, 10 a.m. - 4 p.m. Saturday and Sunday, 1 p.m. - 5 p.m. Enter the Gardens via the Woolloomooloo Gate, near the Art Gallery, and follow the path to the right.

by Elizabeth Richards

The garden surrounding Vacluse House, home of early Australian statesman William Charles Wentworth and his family, is undergoing a subtle and fascinating metamorphosis. Situated in the Sydney harbour-side suburb to which it has given its name, the garden and tree studded park cover approximately twenty eight acres. It has a north-south axis, at the one end a north facing beach on Vacluse Bay, and at the other, southern sandstone cliffs covered with indigenous vegetation. The valley is bisected by a stream fed by small waterfalls. Within this singular setting there stands an early Victorian Colonial Gothic mansion of great character.

In 1980 the Historic Houses Trust became responsible for the care of the property which had formerly been attentively maintained by Trustees and also by the National Parks and Wildlife Service. With a view to restoration, research was

Briefly, the aim is to recreate a nineteenth century garden (completed in the 1860's and mature by the 1880's) as an appropriate setting for the house, to rationalize the relationship between the various buildings which has been lost over time, and to make it accessible to the public in the best possible way. The plan endeavours to recreate the feeling of the property as an estate complex, by contrasting the formal garden with the surrounding parkland; and by restoring the ailing perimeter indigenous plant life to good health. The public amenity value will not be lost, but enhanced. Adequate parking will be provided with other public facilities.

"... the South and East (shores) mostly cleared with pretty Snug houses and Gardens appears very romantic"?²

The valley itself must have been lovely in its virgin state. It had its own microclimate producing wet and dry forest and prolific scrub, markedly different to the windblown cliffs a mile to the south-east. Trees such as Angophoras, Eucalypts, Pittosporum, Casaurina and Banksia of varied species abounded. Fortunately some still exist despite almost two centuries of 'civilization'.



Between 1793 and 1827 the land changed hands several times, but was 'improved' for farming mainly by Thomas Laycock, the first owner, and a quartermaster in the New South Wales Corps, and Brown-Hayes.

Captain Piper leased it for a while as a sporting retreat. Land was cleared to the west for grazing and cultivation, and an orchard and a vegetable and herb garden established. Estate records mention construction of a sheep shed, stock yards, road building and the planting of thousands of fruit trees. These were probably planted on the western side of the creek.

Sir Henry Brown-Hayes was an eccentric Irish knight transported from Cork for kidnapping a Quaker heiress. He is thought to have named Vacluse after the home of the poet Petrarch, now Fontein-de-Vaucluse in the South of France. Sir Henry is also reputed to have imported a shipment of Irish peat with which to encircle his home as a deterrent to snakes.

From 1827-1853 the site became the estate of an ambitious, influential and prosperous public man William Charles Wentworth, his wife Sarah and their ten children. The stables, and probably the barracks (now lost), were built in 1829 in the Gothic style and work began on enlarging the house in 1829. The so called 'golden decade' of Sydney's early prosperity brought a new entrance road, further clearing, a pleasure garden, fencing, exotic tree planting and the development of agricultural productivity.

The 'Landscape' movement in Britain led by 'Capability' Brown had been in full swing at the time of Port Jackson's colonization, but had little impact in the colony as gardening was 'resorted to as an art of necessity'.^{2a}

By 1827 the colony was well established and the more wealthy citizens were in a position to be influenced by the later 'Picturesque' style promoted by colonial landscaper Thomas Shepherd. This style attempted to combine the wildly natural with the rustic and ruinous, appreciating texture, character and picturesque effects. In 1836 Thomas Shepherd wrote -

"No person who has seen the rocks which border the shores of Port Jackson, and the beautiful trees, flowering shrubs, rock lilies and other plants growing there indigenous in masses and groups, unequalled by the art of man, must but admire them. No rocks scene in England or Scotland can be made in the style of magnificence here at a comparatively trifling expense when contrasted with the large sums of money which have been expended on similar objects in Britain."³

He proposed grandly landscaped country seats for gentlemen and recommended -

"let the mansion be a Gothic edifice, or any other such building with some striking features about it ..(in a).. richly wooded setting of light and shade."⁴

Shepherd's advice seems to have been taken very much to heart at Vacluse and it appears that at times the whole family was involved. In 1820 Wentworth had written "A Statistical, Historical and Political Description of the Colony of New South Wales." In it, he gave a great deal of advice on viticultural, citrus, and vegetable growing and was obviously a perfectionist, especially in the culture of cabbages -

"as they grow up, they should occasionally be earthed up a little, and carefully weeded as nothing has a more negligent and slovenly appearance than a foul bed of cabbages."⁵

Wentworth also took his own advice and in the early forties, as member of the Australian Floral and Horticultural Society, won prizes for such diverse exhibits as sugar cane, double jonquils



FOUNTAIN IN THE CENTRE OF THE POND IN THE CORE GARDEN, INSTALLED IN THE EARLY 1860's: THE FRIENDS OF VAUCLUSE HOUSE ARE FINANCING ITS RESTORATION.

and pineapples grown on the estate. An article in Wentworth's own 'Australian', a newspaper, reported -

"A peach grown in the garden of W.C. Wentworth, Esquire, at Vacluse, was pulled off the tree one day last week measuring nine inches in circumference. In this garden there grows the most delicious fruit in the colony".⁶

Sarah Wentworth wrote many letters of advice and direction concerning the garden after she had left the house in 1853. She sent seeds and trees, and had a practical knowledge of equipment. She mentioned "small garden tools which I bought for my own and the girls use" and suggested a new way of eradicating weeds with the use of salt water. She wrote, "by using a cask with the horse and cart you could try the carriage road first".⁷

By 1837 Loudon's revolutionary Encyclopaedias became available, more plant material could be obtained and catalogues became common; this led to greater public exposure and acceptance of the new 'Gardenesque' movement from which Vacluse was not immune.

The forties, though drought stricken and financially depressed, were a time of consolidation and planting at Vacluse. In order to expedite the passage of the first Constitution through the British Parliament, the Wentworth family leased the property and went to live in England. Their agent, John Alexander, did his best to preserve the garden, and wrote in 1856 -

"I have seen Hosking (the tenant) today he showed me a list of 1 gardener at £40, 2 at £25, and 1 at £20 and a coolie at £15 who weeds the garden . . . I told him he was to lay out £200 a year on the garden and grounds".

But this seems to have been to no avail, he later wrote -

"When . . . last out at Vacluse he had several men employed in rooting out the grass which had shamefully been allowed to run wild over the walks and bed . . ."⁸

A Colonial Garden re-emerges (continued)

The family returned briefly between 1860-1, and it was probably at this time that the fountain was installed and the verandah extended. It is to this period that the garden will be restored, though unfortunately the vineyard, orangerie, orchard and vegetable garden are now lost and evidence as to their original position is scant.

Sarah and William Wentworth never returned to Vacluse but the estate was occupied by family members and associates until 1910 when it was resumed by the Government.

Between 1901 and 1930 beds were edged, the carriage circle was formalized and the gravel paths were replaced. The estate lost land to subdivision and road building, the original drive was grassed over; the gates were placed in their present position in the 1910's. In the 20's remnants of the vineyard and orchard were still visible, and the kiosk, toilet, cottage, greenhouse and bridges were built at this time. Pines were removed from the site of the greenhouse, and the levels around the stables were altered.

During the Depression much work was done in order to give employment. The concrete paths, the stone retaining wall (now removed), the Hydrangea walk and the Eucalypt plantings all date from this period. Rose beds were also incorporated in the carriage loop. Camellias and Rhododendrons were introduced to enrich floral displays.

Between 1940 and 1950 there were further plantings and the shrubbery continued to extend and grow taller. Some of the old Araucarias were dead and Willows along the creek were removed. The rear service area, once a gravelled yard close to the kitchen, was walled in and grassed over.

From 1950 there was a continuing loss of original and interesting plants such as two large *Magnolia grandiflora*, a Cork Oak, Banksias and a Cedar of Lebanon. In 1966 an enormous Wistaria vine covering the verandah was replaced because of borer infestation. The oldest tree on the site is a vast Moreton Bay Fig near the kiosk: it is thought to pre-date 1827.

A description of the four major elements in the conservation plan follows.

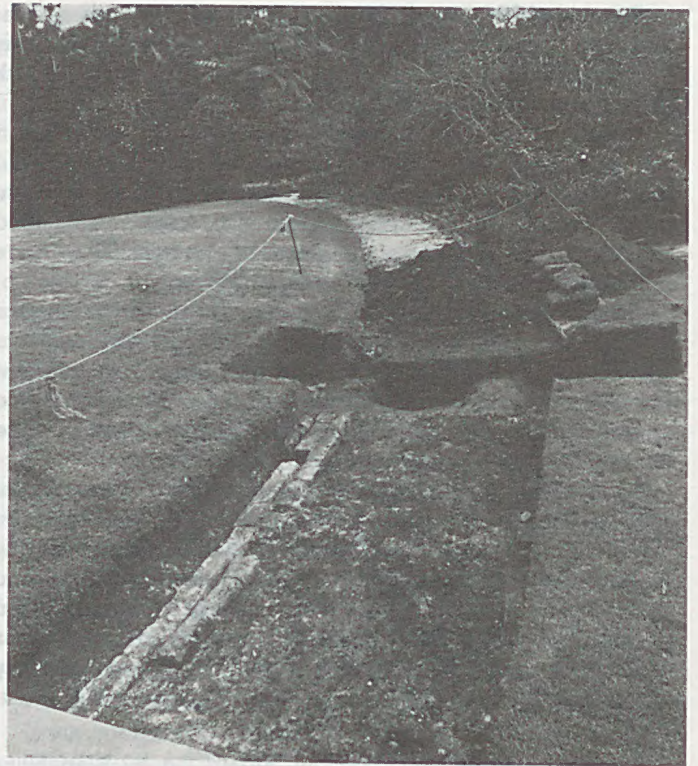
The Main Entry and Drive

Loudon echoed earlier sentiments on the importance of 'approach' in an entry drive by saying that it "ought to display to advantage the beauties of that part of the place it passes through".⁹ Shepherd in 1834, advocated a range of devices for entry roads - clumped trees, bridges, glimpses of the house, paired trees and gates. All of these recommendations have been followed.

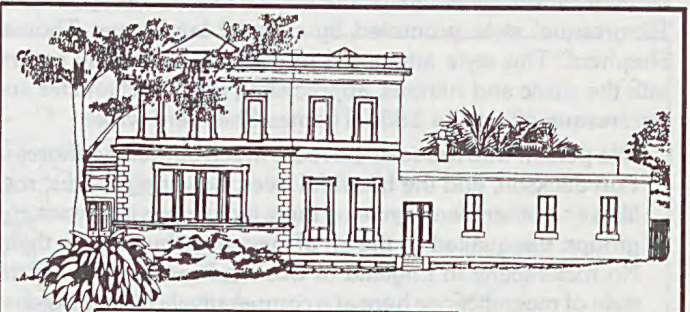
The Brown-Hayes entry road had come down from the ridge more or less following present-day Fitzwilliam Road. Wentworth built a new road which Vacluse Road now follows; it crossed into the beach paddock, passed through a grove of Oaks, across a bridge, past a stand of giant Bamboo and an Osage Orange (*Maclura pomifera*), all still extant. Maps and photographs show a fence between the drive and beach.

The road curved then curved up away from the beach toward the house past a Stone Pine (*Pinus pinea*) which was situated somewhere near the gates on the corner of Olola and Wentworth Avenues. These sandstone gates, now rendered, are the original gates, and were probably sited back along the track at the Greycliffe House turnoff. A c. 1900 photograph shows them set among rocks and native trees spanning a sandy road.

The final part of the road followed the modern fence line along Olola Avenue until it entered the carriage loop in front of



ARCHAEOLOGICAL EXCAVATION OF CORE GARDEN PATH, REVEALING ORIGINAL BRICK EDGING - photo E. Higginbotham, Archaeologist.



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THE MAIN ENTRANCE GATES IN THEIR ORIGINAL POSITION : PHOTOGRAPH C1900 IN THE VAUCLUSE HOUSE COLLECTION

the stables. At this stage there was a deep ditch on its east side, to channel the run off from the hill behind. Various forms of fencing were used on the estate over the years, particularly post and wire and estate fencing; as part of the restoration, the newly reconstructed drive will be contained with traditional forms of fencing. Some of this will be estate fencing, a type made of mesh and bought in sections which were easily pushed into the ground. Sarah wrote -

"I will look at some wire fencing (which) . . . was so strongly supported that cows and horses could be kept out quite well and no fire will injure it"¹⁰

Two widely spaced Norfolk Island Pines proclaimed the end of the journey. These pines were encouraged in the colony by Governor King who had been governor of Norfolk Island in the late 1700's. Stringer and Tanner suggested that perhaps they were the 'antipodean dream of Scotch firs'¹¹ These are now replaced, and a grove of Oaks planted to the east of the loop. The carriage circle was really just a farm road, roughly gravelled without edges and bounded by rough grass. The levels are to be adjusted to give plausibility to the stables.

Plantings in this area include Port Jackson Fig (*Ficus rubiginosa*), Illawarra Flame (extant), hedge of the Cape Honey-suckle (*Tecomaria capensis*) and also a Bunya-Bunya Pine (*Araucaria bidwillii*) newly planted in the central lawn.

Plantings near the kitchen include Norfolk Island Hibiscus (*Lagunaria patersoni*) extant, and a row of Bananas edged with a low paling fence. The Jacarandas near the stables and in the walled area are modern.

Visitors will walk along the recreated drive. The house and garden will be screened until just before the impressive vista to the facade of the gothic stables comes into new.

The gothic style of these buildings suited the 'Picturesque' which was a popular artistic and cultural movement, reviving notions of chivalry and medieval romanticism in literature, poetry, art and architecture. Wentworth was influenced by Governor and Lady Macquarie's use of it through Francis Greenaway, and the stables building at Vacluse was the first secular use of the style in the colony. Broadbent and Kerr made the following observation which seems apt in this context -

"In Australia romantic associations were of even greater importance than they were in Britain. Buildings were designed to be picturesque objects enhancing the pretence that the view was a beloved English one. The gothic was seen as a national style; it appealed to romantic sensibility; and it also added an air of pretended antiquity to the blank canvas of the new country and dubious lineage of most of its inhabitants"¹²

The Core or Pleasure Garden

This is to be recreated as a composite of those style changes mentioned, but in general conforming to the middle period of the nineteenth century. The domestic character of the pleasure garden is to be emphasised to contrast with the surrounding park. Access will be only through the house. The paths will be gravelled with brick edge drains as revealed by archaeological excavation. The basic layout has not changed but the period detailing has been submerged with the years. There is to be an

A Colonial Garden re-emerges (continued)

'old fashioned' rose garden, climbing plants will be trained over metal arches and bridges will have bamboo handrails.

Because of the vagaries of water supplies, plants had to be hardy as well as decorative, therefore, Iris, Geranium, Yucca, Agave, Oleander and Bamboo were used. Some Camellias will be transplanted and further research will be carried out to ascertain the age and provenance of some of the existing very large specimens - an interesting possibility is that some may have been cuttings from Camden Park.

The outer perimeter path and shrubbery will be fenced, but it will not be visible from the house as Sarah Wentworth wrote that she disliked seeing fencing from the windows.

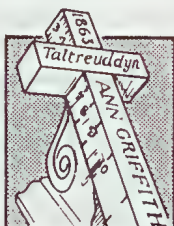
The verandah was important as an extension of the sitting room especially in summer. It brought the house in touch with the garden through the french windows and the garden moved into the house in pots, planters and vases.

Sundials

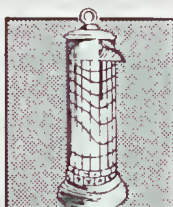
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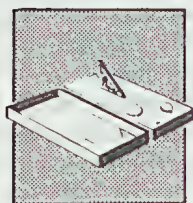
Equatorial



Cross



Pillar



Pocket



Horizontal



Vertical Wall

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Park and Pasture

The area once used on the estate for stock and agriculture is now very much smaller. From 1827 there was a large cultivated paddock to the west and grazing land east along Boambillee Avenue; the Oaks here are thought to have been planted to delineate its boundary. The beach paddock will be maintained as a public picnic and recreation area.

Rebecca Martens' view from Vacluse shows Willows and other trees following the creek line. The beach paddock Willows are c. 1850. The Eucalypts in the rear paddock were planted in the 1930s as were the avenues of *Ficus hillii*, Brush Box, (*Tristania conferta*), Melaleuca and Chinese Elm (*Ulmus parvifolia*). The creek was also lined with stone at that time.

Estate Backdrop

There are approximately 10 acres of rough bushland, much of it in poor condition, on the perimeter of the estate and it is proposed to use the Bradley Method of bush regeneration, already used with great success at South Head, to rid it of weeds and exotics such as the Morning Glory and Lantana. Some replanting of original native species will be carried out.

The proposed restoration will take several years to complete although considerable work has been done already toward the eventual re-emergence of this great garden. 1988 will perhaps be the year to view and celebrate its transformation.

Footnotes

1. I. Mather, "The Vacluse House Gardens; a reassessment": Historic Houses Journal 1982/3 (Sydney 1982) pp 1-11.
2. P. Good, "The Journal of Peter Good", ed. P.I. Edwards: Bulletin of the British Museum (Natural History) Historical Series (London 1981) p.78.
- 2a J.C. Loudon, "An Encyclopaedia of Gardening": (Longman, London 1824) p.493.
3. B. Bligh, "Cherish the Earth": (David E11 Press in Association with the National Trust of Australia (NSW), Sydney 1980) p.43.
4. R. Stringer and H. Tanner, "Converting the Wilderness; the art of gardening in Colonial Australia": (Langridge Press for Australian Gallery Directors Council, Sydney 1979) p.44.
5. W.C. Wentworth, "A Statistical, Historical and Political Description of the Colony of New South Wales" (from "An Australian Gardeners Anthology", Rigby, Melbourne 1982) p.8.
6. J. Hughes, "Vacluse House, report on select list of manuscripts": (Historic Houses Trust of NSW, Sydney 1982); quote from "The Australian" 13.1.1830; p.153.
7. ibid. quote from a letter from Sarah Wentworth to Thomas Fisher, 22.5.1868, p.15.
8. ibid. John Alexander Letterbook, 12.2.1856, p.3.
9. J.C. Loudon, "An Encyclopaedia of Gardening": p.1016.
10. J. Hughes, "Vacluse House, report on select list of manuscripts": quote from a letter from Sarah Wentworth to Thomas Fisher, 22.5.1868, p.15.
11. R. Stringer and H. Tanner, op.cit.p43.
12. ibid. p.44.

Note: A Garden Exhibition will be held at Vacluse House, until at least the end of August, and will be open daily from 10 am to 4.30 pm. For further information phone (02) 337-1957.

Gardening in the Soviet Union

by Dorothy Downes

From 1975 my husband and I lived in a diplomatic apartment block in Moscow, and also had the opportunity of visiting all the Republics and Outer Mongolia. My husband was seconded to the Embassy from C.S.I.R.O. as Australian Scientific Counsellor, to facilitate exchange of scientists and scientific information following Australia's scientific agreement with the U.S.S.R. (this exchange ended with the Russian invasion of Afghanistan).

The Russian people are deeply fond of flowers, gardens and forests. However one never sees private gardens remotely resembling the Australian suburban garden, either in form or content. In the villages on the edge of farmland the charming little wooden houses, with contrasting painted fretwork round windows and doors, each have a paling fence surrounding a small unkept garden. The houses line each side of the roadway, and each has a rough wooden bench outside the fence. Villagers relax on these benches and chat to friends. Between the front fence and the house there will usually be one or two lilac bushes, perhaps a cherry tree, some self-sown annuals like cosmos, and a few clumps of hardy perennials such as Golden Glow and perennial phlox - the kind of flowers I knew in Grandma's garden. Behind the double-glazed windows there will usually be a display of geraniums. The varieties are unvarying, as there is nothing in Russia to compare with 'The Flower of the Year', nor are there continuous developments of new varieties of either flowers, fruit or vegetables.

Since most Muscovites now live in high-rise apartments the Moscow scene is quite different from that of the villages. Despite the Russian love of flowers, window box displays very rarely soften the bleak exteriors of apartment blocks. The rare window box seems to produce only a variety of climbing bean with a red flower, each bean grown up a vertical wire to provide a sort of balcony screen in summer. In our apartment (two Russian apartments made into one) we had a narrow balcony about 30 feet long, and my husband made window boxes the full length of the balcony. The soil was 'acquired' from a nearby building site, and I transferred a selection of worms from puddles after rain. In all Moscow there are but a handful of small markets where fruit, vegetables and flowers from the south provide, at a price, the possibility of adding variety to the generally monotonous fare. It was from one of these that I bought my seeds and seedlings. Seeds are gathered by individuals from year to year (and so new varieties are not developed), are labelled with handpainted pictures of the flowers, and are sold by the teaspoonful, wrapped in a cone of old newspaper (paper is scarce in the U.S.S.R. - perhaps they care about their forests more than we do). The peasant women selling the seeds and plants are always full of chat about their products. The season is short, of course, but each summer our balcony was a bower of flowers - pansies, English daisies; phlox drummondii (red only) and trailing blue lobelia, I also grew raspberries and tomatoes, but you can see there is a vast difference from the range available to us here.

Cut flowers can also be bought in the markets and in the handful of florist's shops. These also come from the warmer south - carnations, roses, gladioli, dahlias, chrysanthemums - but again lacking in variety. When meeting or fare-welling friends or at concerts, Russians present flowers - usually long-stemmed carnations - one, three or five (it is considered unlucky to give an even number) seldom more as they are very expensive. There are

also a very few plant shops, again with little choice, mainly potted azaleas.

As in many European countries, city dwelling Russians tend to have small allotments outside the city, and to spend much of the leisure growing vegetables. As with flowers, there is nothing approaching the variety available to us - potatoes and onion, cucumber, pumpkin, some herbs, almost covers the range. We were in the privileged position of being able to import food from England, Denmark and Finland. Our Russian friends were excited to try, for example, Brussels sprouts, or asparagus (tinned), about which they said they had read but never expected to sample.

Friendship with Russians was very difficult to establish. The ordinary Russian people are very warmhearted and hospitable, but contact with foreigners is strongly discouraged by the powers-that-be. However, in time we did make a number of Russian friends and visited them in their homes - a most unusual experience for diplomats. One family we knew very well lived in one of the few remaining two-storey houses in Moscow. Four families shared what had once been a one-family home, surrounded by an old and unusually large garden. One summer day, after a birthday celebration indoors, we had tea, made in a samovar, in the garden. Like the village gardens it too was unkempt by our standards, but pleasant, with strawberries and a few flowers competing with the uncut grass. We sat on rough wooden benches round a small homemade wooden table, under an old cherry tree, and felt ourselves back in the time of Chekov. I expected a long wait for our tea, but as the chips of wood are burnt in the outer hollow of the samovar with the water in the centre, we had boiling water in a very short time.

There are few formal public gardens in Moscow, and few formal beds. I remember only tulip beds near the Kremlin. There are, however, many public parks, with trees and seats, but no mown lawns or flower beds. Only once did I see a lawn mower at work in Moscow, and all the passers-by were gathered round to watch it. Any grass cutting on banks and forest verges is down by hand with a scythe. There has been a tremendous amount of tree planting along main roads - almost the full length of the Moscow-Leningrad road (600 km) is lined with trees; there are tree-filled squares and avenues in provincial cities, and usually here too the industrial area of the city is separated from the residential area with banks of trees. There is a Botanical Garden in Moscow, but not on the scale nor with the variety of plants displayed, for example, in the Sydney Gardens. Near to our apartment was a tiny garden which claims to be the oldest Botanical Garden in the world. We were, however, more impressed with the Botanic Gardens at Batumi, on the Black Sea - maybe because, to our surprise, it has a large and flourishing Australian section.

The natural forests around Moscow are mainly silver birch, with a sprinkling of pines. We were able to cross-country ski in winter, and walk in summer in the forest, only ten minutes drive from our apartment. In season, the floor of the forest is carpeted with lily-of-the-valley. In autumn the Russians are out in the forests with their baskets gathering many types of mushrooms, which they pickle in various ways to supplement their monotonous range of food. Also in the forest they find wild strawberries. These are very tiny - about a quarter of an inch long, but with a delicious flavour.

The Russians do not use herbicides and one pleasant consequence is that a wide variety of spring and summer wild flowers abound. Picking wild flowers is permitted and all summer our apartment was filled with bowls of wild flowers.

Using the Perfumed Garden in the Home

by Marian French

I can't help singing the praises on the benefits and satisfying pleasure one receives from using the perfumed garden in the home 'as grandma did'.

I am sure we have often been enchanted and refreshed by the sweet fragrance of flowers and fruits when walking in our gardens. The delight of a Lemon Verbena growing near a kitchen door to leave its clear clean perfume as you brush past... Eau de Cologne mint, Lemon Balm and Thymes edging pathways to occasionally bruise a leaf and so release that natural fragrance... a hedge of Lavender stirring in a breeze... Roses in bloom... scented geraniums, violets, pinks, wallflowers, honeysuckle, camomile, bergamot, rosemary and so the list goes on. What better way of extending the enjoyment of the labours in this garden than to gather the fragrant petals and leaves and by careful blending and drying, preserve them to fill the home with natural scents and fragrances.

I will always remember early in my childhood my great grandmother taking me by the hand to enter the parlour.

The parlour in those days was used only on Sundays or for special visitors, definitely forbidden to children unless accompanied by an adult. For this reason alone it held a fascination for my young mind long before I was to appreciate the pleasures inside. Amongst the usual furnishings were her treasures she had brought with her as a young girl from England. But most of all I remember perfumes, rather heavy for an immature nose such as mine at the time. She loved her garden and here in this room I had my first introduction to the many ways of preserving and using the perfumed garden in the home.

Bowls overflowing with freshly dried Lemon Verbena leaves; lace sachets filled with Lavender and draped over the arms of velvet chairs; headrests plumped with scented Geranium leaves; porcelain containers filled with Pot Pourri; pressed flower miniatures; fragrant petals and herbs in muslin envelopes scented her writing paper.

My memories of these visits are forever renewed from the perfumes around me in my own garden of Lavender; this flower was always placed under our pillows at night to ensure a good nights sleep.

In this fast moving lifestyle of to-day with aerosol sprays and time at a premium we seem to have forgotten these simple uses.

The enjoyment of creating a pot pourri is a simple one. The fragrant flowers and leaves gathered just as our grandmothers did in the early morning when the dew has dried and before the sun begins to take the precious oils from them. Spread to dry in a warm airy place, (not in the sun). By adding a fixative such as orris powder and a combination of several oils it will last for years. However combinations of sweet smelling petals, fragrant leaves, herbs and spices alone will 'sweeten the air'. I have a large crock just inside the front door. As needed I remove the lid and stir. The perfume spreads through the house and lingers on.

Eau de Cologne mint and Lemon Verbena cut and hung in bunches are quick to dry, scented geraniums take longer. Strip the dried leaves from the stalks and place in decorative bowls on coffee tables, by the telephone. Crush leaves gently to release the fragrance. A quick and simple air freshener.

The stalks can be cut and tied into bundles about 18" long. These may be stored and are great to throw on an open fire, releasing the powerful lemon and cologne perfume. Try putting

Eau de Cologne leaves amongst your pillowslips for a clean fresh fragrance.

Lavender, the herb of tranquility, with its old world perfume has been known and used for centuries.

Its disinfectant and insect repellant qualities combined with its sweet smell have made it a must in domestic use down through the ages. Even today we still see Lavender disinfectant on the supermarket shelves. A few drops of Lavender oil on the skin will keep flies and mosquitoes away... also for burns and stings and to soothe and disinfect cuts and abrasions... a cotton ball soaked in lavender oil and placed in a wardrobe will kill mildew and mustiness... place leaves of lavender amongst dried fruit to prevent weevils... the dried flowers filled into sachets to perfume clothes and repel moths... in pillows to induce sleep and as a cure for headaches.

But I mustn't get carried away on the virtues of Lavender but hope to have perhaps kindled a spark somehow that will incline you to walk outside and perhaps cut back that 'leggy branch' from your '*Lippia triphylla*' and collect those full brown roses and so make 'your garden stand still' the subtle scents and fragrances living on in their dried form.



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RARE WEEPERS - *Pyrus salicifolia* 'Pendula' - Weeping Silver Pear.

Cotoneaster salicifolius 'Pendula' - most attractive, hardy, evergreen on 1 metre plus standards.

Forsythia suspensa - for late winter colour.

Dacrydium cupressinum - N.Z. Rimu.

Cedrus libani 'Sargentii' - Weeping Cedar of Lebanon.

TREES - We have a very large selection of trees. To mention just a few. Hornbeams, Lindens, 10 varieties of Beech, the Southern Beeches - *Nothofagus*, *Elaeocarpus* - the Blue Berry Ash, Dogwoods, *Parottia*, *Magnolia campbellii* *ixlennei* and of course all the blossom trees including the flowering Cherries, 'Autumnalis' 'Shirofugen' and yedoensis.

SHRUBS & CLIMBERS - *Pieris* in many varieties, Viburnums also, Osmanthus, white and yellow Banksia roses, Clematis. Proteas and leucadendrons, and the beautiful bright blue flowered ground-cover, *Lithospermum*. Camellias 'Elsie Jury', 'Leonard Messel', 'Donation' - again, just a few chosen from many.

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Garden Escapes - (When is a Weed not a Weed) in Western Australia

by Greg Keighery

Haunting old (and operating) rubbish tips, cemeteries, abandoned townsites, derelict farmhouses and walking along railroads and old roads could seem an odd recreational pastime for a botanist professionally involved in the biology of Western Australia's native flora. It is, however, an excellent way to learn about weeds and the composition of gardens past.

Botanists in Australia (and probably more so in Western Australia) have largely confined their studies to the native flora, and hence neglected introduced or cultivated plants. This should not be surprising as the native flora of Australia is rich and poorly known. In Western Australia alone estimates for the south western region of the state give up to 20% still to be named (ie: 4,000 currently named, leaving 800 unnamed species). Much of this unnamed material is rare, and for conservation purposes alone, it is imperative that it be studied and named.

Obviously our most rampant weeds are reasonably well known (doubtlessly to all gardeners and farmers), but what of the less rampant 'weeds', in this case garden escapes?

Garden escapes in the broadest sense are "plants growing spontaneously outside a fenced area, or as a weed in a sown or plant community" (1) This definition, from New Zealand, does not exclude occurrences of single plants found along roads or in rubbish tips. Such plants are very numerous growing from dumped seed, cuttings or plants. They are garden outcasts, rather than escapes. Generally they do not persist or reproduce (if annuals). Some of these can be listed, as an illustration: *Allium* sp (onions); *Alstroemeria* hybrids; *Cotoneaster* species; *Cucurbita maxima* (pumpkin); *Cytissus* species (Broom);

Echeveria x hybrida (Hen and Chickens); *Genista* species (Broom); *Linaria maroccana* (Baby Snapdragon, Toad flax); *Pelargonium* hybrids; *Lonicera* species (Honeysuckle);

Melia azderach (Cape Lilac); *Nigella damascena* (Love in a mist); *Peperomia* species; *Phyllostachys* species (Bamboo); *Petunia x hybrida* (Petunias); *Portulacaria afra* (Jade Plant); *Sedum denroideum* (Stonecrop); *Spartium junceum* (Broom) and *Tradescantia* spp.

Obviously garden outcasts are a selection of what is being currently grown (and dumped) in gardens. These species are worth nothing in local floras, though they rarely are, Willis (2) being a notable exception. I prefer to exclude sporadic occurrences (outcasts) from garden escapes by adding to the definition that the "plants are reproducing and expanding within the habitat, and have maintained themselves over time, without human assistance."

So Garden Escapes are alien or exotic plants in the process of either becoming naturalized or dying out. They have shown the ability to persist over time within the region of their original planting (or dumping); and have spread to some degree within this region. However, they still have very limited geographical ranges, and have not shown tendencies to aggressively spread outside this range.

Why Study Garden Escapes?

I have already noted that limited manpower, and other priorities have limited study of alien plants. However, a second problem is naming this exotic material, which is often of complex hybrid origin, for which there are few reliable keys and even less

reference collections in our herbaria, for comparison. This of course leads to the 'Catch 22' situation noted by Symon (3) - correct naming and study of garden escapes is greatly hampered by a lack of collections.

Despite these problems a study of garden escapes is of scientific interest, in that we do need to know what are the species likely to escape from cultivation. Some may have the capacity to develop into the serious weeds of the future. Careful monitoring of all alien plants enables appropriate action to be taken before the problem becomes too severe to handle.

Many of these plants may also be of considerable horticultural interest, in being old or unusual cultivars lost in gardens due to changes in garden fashions. I know one example to quote. At Kings Park we have a Californian Garden to which we will be able to re-introduce the Mantilija Poppy (*Romneya coulteri*) because it flourishes wild and uncared for on the slopes of Mt Eliza, some 300 metres away.

As an illustration of how few studies have been made on Garden escapes in Western Australia, I can recall only one ecological study which mentions Garden escapes. Abbott (4) notes that *Cotyledon orbiculata* is well established around the abandoned light house keepers huts, on Breaksea Island (near Albany).

I will now give a brief list of some garden escapes to illustrate how divergent a group they are.

'Common Garden Escapes'

Agave americana (Century Plant)

This large perennial herb has become a dominant component of the vegetation of Anzac Bluff, Mt Eliza, Kings Park. Plants of this species are monocarpic (shoot dies after flowering), and spreads via rhizomatous off shoots produced after flowering of the central dominant shoot. By this means dense clumps are formed, that are highly fire resistant. Some of these smaller side shoots flower after the dominant shoots flower but produce bulbils in the inflorescence instead of fruits. These vegetative shoots are spread up to 3 metres by the decay of the inflorescence axis. Copious amounts of seed are produced on the main inflorescences. The species is self fertile, but pollination is achieved via the action of nectariferous birds (chiefly Red Wattle Birds and Singing Honeyeaters) for whom Agave is now the major food source. Seeds are spread via the wind but their ability to form new colonies appears limited.

Small colonies of this species are found around many abandoned stations, farms and towns in the more arid regions of Western Australia.

A large population is also known to be covering sand dunes on the Greenough Flats (between Geraldton and Dongara) from a wind break planted ca 1880.

While still very restricted in geographical terms, this garden escape is on the verge of becoming a permanent addition to the flora of Western Australia, and an important food source for native birds.

Narcissus species (Daffodils/Jonquils)

Species of *Narcissus* have probably been cultivated in Western Australia since the arrival of the first settlers in 1826/1829 (depending on if you live in Albany or Perth). Because of their bulbous nature, colonies of this genus can frequently be found as garden outcasts in old gardens or along roads, but in swampy situations vegetative propagation has given rise to large colonies of these bulbs.

Currently all naturalized material of *Narcissus* in Western Australia has been labelled *N. jonquilla* (Green (5)). However, comparisons between selected naturalized *Narcissus* collections and *N. jonquilla* at Kew in 1978, revealed that all these collections were *N. tazetta*. Subsequent collecting confirmed that *N. jonquilla* does not occur in Western Australia.

Subsequently I made extensive collections of *Narcissii* in Western Australia and found a more complex situation. *Narcissus tazetta* (Jonquil) with flowers with white lobes and a lemon yellow or orange corona (forms with a white corona were occasionally encountered) is the most common species. In Western Australia it is a robust plant with large leaves (30-80cm long and 15-25mm wider), many flowers in the umbell (9-13) and perianth lobes that are separate and do not overlap. This species can be found from Geraldton to Albany.

A second species, *Narcissus papyraceus* (Paper-white) which differs from *N. tazetta* in having more glaucous, smaller (7-9mm wide) leaves, pure white flowers with large degree of overlap of the perianth lobes, fewer flowers per umbell (4-6) and smaller flowers.

However because of long periods of cultivation, selection and vegetative propagation many intermediate forms occur. Some of these forms have 2-6 flowers per umbell, generally longer, wider leaves than *N. papyraceus* and larger flowers.

A double form of *N. tazetta* (? *N. tazetta* cv 'Cheerfulness') can also be found as a sporadic garden escape (recorded from Geraldton, Clackline, Kings park and Bunbury).

Even more rare is the subspecies *N. tazetta* ssp. *aureus* (Soleil d'Or) which has only been found as a large clump in bushland in Kings park.

Narcissus pseudo-narcissus (Daffodil) and *N. poeticus* can be found as garden outcasts along road verges or in abandoned gardens. However, one large colony of Daffodils is known in a spring fed swampy paddock south of Bridgetown.

Narcissus is perhaps the ideal genus to study as a cross section of all the types of alien plants. it contains naturalized species, garden escapes, outcasts, many different forms, it is easy to locate and best of all it is a great way to obtain a garden full of *Narcissii*.

Rare Garden Escape.

Some garden escapes can only survive under very specific conditions rarely encountered in Western Australia. Usually this involves a need for copious water (ie; lawns, or soaks or drains). *Musa paradisiaca* var *sapientum* (Banana).

A small colony of Bananas persists around an artesian bore at the northern end of Garden Island, and a few small colonies can be found on seepages and creeks along the Swan River. All colonies are seed sterile, and maintain themselves by rhizomatous spread, conspicuous size, narrow habitat requirements and ease of elimination of wild stands *Musa* will never become a weed.

Bellis perennis (Lawn or English Daisy)

Readers in Eastern Australia may be surprised to learn that this species has only been found in lawns (and usually in shaded areas) as the use of automatic reticulation has increased. It is still only rarely encountered, and again probably will never become widely established.

Colocasia and *Canna*.

Drains entering the Swan River usually originate in cultivated land and end below the water table in swampy margins of the

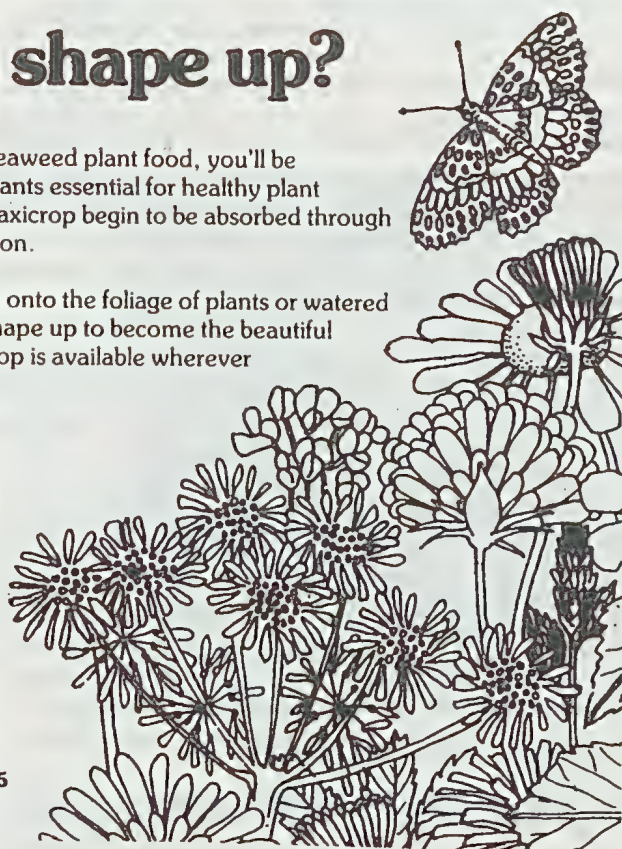
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Garden Escapes (continued)

river. If you can fight your way through the blackberries guarding these regions you can find that drains contain some very unique plants, and can be a botanical world unto themselves.

One of the most unique combinations I have ever encountered, discovered in a drain of land fill site in Maylands (a Perth suburb) was a combination of *Colocasia esculenta* (Taro) and *Canna generalis* (Canna). Both spread along drains by rhizomes or fragmentation, since neither set viable seed. Since both species require areas with permanent almost fresh water, it is unlikely they will ever become more widespread.

Aquarium/Pond Escapes.

These escapes have given Australia some of our most notorious weeds (*Elodea canadensis*, *Eichhornia crassipes*, and *Salvinia modesta*). While current restrictions on importing aquatic plants may ensure that such occurrences do not re-occur, there is considerable evidence from many of our rivers that people still plant or dump aquatic plants. Fortunately the vast majority of these are relatively harmless.

Waterlilies (*Nymphaea* species) are occasionally encountered. Reasonably large colonies of *Nymphaea capensis* have been found in the Swan, Harvey and Margaret Rivers. While *Nymphaea fulva* occurs in the Vasse River.

A second aquarium escape, *Vallisneria spiralis* (Eel grass) has the odd situation of being native to tropical regions of Western Australia, and introduced (overseas material) by dumping from aquaria into several rivers (Canning and Margaret River) in southern Western Australia. This is a very vigorous rhizomatous perennial forming large colonies and may prove to be a serious weed in the future.

Dangerous Escapes

Phoenix dactylifera (Date Palm)

Date palms persist for long periods after cultivation has ceased, but they have escaped only once. At Millstream Station, on the Fortesque River in the Pilbara region of Western Australia.

The palms were planted around the station house in the late nineteenth century. The house is situated by a series of large permanent fresh artesian pools, the edges of which are the habitat of the rare native palm, *Livistonia alfredii*. The date palms have established themselves so successfully in the area that they are now competing with the native palms, and are being removed by the National Parks Authority.

Ailanthus altissima (Tree of Heaven)

A widely used, and very pollution resistant tree for inner city regions, *Ailanthus* has done too well in Subiaco, an inner Perth suburb. The tree suckers and seeds profusely. The seeds are spread by the wind and most empty blocks or lanes are rapidly filled by *Ailanthus*. Despite not being mentioned in any work on the flora of Western Australia (nor is the date palm) the Tree of Heaven is a declared noxious weed in City of Subiaco, and has survived many attempts to eradicate it.

Crop Escapes - Commercial Escapes

Cultivated landscapes in Australia consist of pastures, crops, market gardens, orchards and home gardens. Since crops, orchards and market gardens are the common landscapes of the Southern Western Australia, many of their component plants have become feral.

Most of the crops grown in market gardens are harvested before they seed (cabbages, radishes, carrots, etc) so they rarely produce seed. However, if waste land is available nearby,

unusual events (eg floods, or some sort of disturbance) may spread plants to these areas where they can seed. Parsley (*Pastinaca sativa*); Radish (*Raphanus sativus*); Lettuce (*Lactuca sativa*) and Celery (*Apium graveolens*) have all been recorded growing on nearby roadverges, drains or swamps. These species soon disappear being unable to compete with the local established weed flora. Celery has, however, spread along drainage lines and is slowly becoming naturalized.

Unlike market gardens, grain (or oil) crops are harvested after seeding has occurred. Wheat (*Triticum aestivum*); Barley (*Hordeum vulgare*) and Rapeseed (*Brassica napus*) are regularly listed as naturalized weeds (5). Yet they are only encountered along road verges or railway lines growing from spilt grain. Thus, while they are common components of these areas during winter and spring, none of the above re-seed but are replenished during the next grain carting season. I feel that these species are listed as naturalized weeds partially because of their economic importance and common occurrence on roadsides but under any reasonable definition they are only outcasts.

Orchard crops do often seed, or grow from outcast trees or cuttings. A survey carried out on roadsides in New England (6) found large numbers of feral fruit trees on roadsides, growing from seed, yet these were never mentioned in local floras. A similar situation prevails in the fruit growing regions of Western Australia. A survey I carried out last year found feral Apples (*Malus sylvestris*); Nectarines (*Prunus persica* var *nectarina*); Peaches (*Prunus persica*) and rarely Quinces (*Cydonia oblonga*) along roadverges in the Donnybrook to Bridgetown region.

Kings Park (Botanic Gardens Escapes)

Because of a long history of gardens (public and private) close to urban bushland, Kings Park has a number of unusual garden escapes.

I have already mentioned *Agave americana* and *Romneya coulteri* on the slopes of Mount Eliza. These disturbed slopes also contain large populations of *Wigandia caracasana*, *Arundo donax* var *versicolor* (Variegated Giant Reed), *Yucca filamentosa* (Adams Needle) and *Tropaeolum majus* (Nasturtium), most of which have not escaped elsewhere.

The bushland also contains several very odd escapes, already mentioned was *Narcissus* "Solei-D'or", but more unusual are two feral trees. *Brachychiton populneum* (Kurrajong) and *Eucalyptus citridora* (Lemon Scented Gum) originally planted as avenue or lawn trees, have spread into the bushland and are still expanding their ranges within this area.

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Old Garden Sites

Old garden sites contain a wide variety of persisting plants, chiefly bulbs and perennials. A briefly annotated list follows: *Agapanthus orientalis*, *Acer* species (Maples); *Alstroemeria pulchella* (Parrot flower), *Alstroemeria ligtu* hybrids:

Althea rosea (Hollyhock); *Amaryllis belladonna* (Easter Lillies - normally small clumps around buildings). A large colony of several hundred plants has been found at Arumvale siding, near Augusta. Plants of deep pink, pale pink and white (? var. Hathor) are found here. Seedlings including hybrids between deep pink and white flowered forms are common; *Arum italicum* (Italian Arum; naturalized in a pine plantation at Nanga near Dwellingup); *Asparagus* species; *Buddleia* species (Butterfly Bush); *Cheiranthus cheirii* (Wallflowers); *Eschscholzia californica* (Californian Poppy - a large colony of this lovely plant has covered a large part of the demolished abandoned forestry settlement at Nanga, south of Dwellingup); *Gazania ringens* (often used as a coastal ground cover in Western Australia, and sizable colonies can often be found in coastal Perth suburbs); *Ficus carica* (Fig); *Fraxinus* sp. (Ash; suckers along creeks); *Ipeion uniflora*, *Melianthus major* (Cape Honey Flower); *Iris germanica*, *Myrabilis jalappa* (Four O'Clocks), *Leucojeum aestivum* (Snowdrops); *Lilium candidum*; *Opuntia* species (Prickly Pears); *Pelargonium domesticum*; *Petunia x hybrida* (reversions of garden Petunia's are encountered on empty lots throughout Perth); *Plumbago capensis*; *Populus alba* (White Poplar, this suckering tree has formed large stands in several swamps near Bunbury), *Rosa* species (Escaped roses are a complex group, under study at present); *Robinia pseudoacacia* (False Acacia); *Salix babylonica* (Willows); *Schinus terebinthifolius* (Brazilian Pepper - found spreading along creeks at Geraldton); *Scilla hispanica* (Bluebells); *Sutherlandia frutescens* (Bladder Senna) and *Watsonia* species especially *Watsonia aleitroides*.

The naturalized flora of Australia originates, and spreads from many different directions. I have given examples originating

from crops (cereal, fruit, market gardens), aquariums, botanic gardens and home gardens (towns, farms, rubbish tips etc.).

This flora is not stable (unlike the native flora) over brief time periods, but is in a state of constant flux. There is a complete spread from aggressive weeds (eg. Veldt Grass, Thistles, Blackberries) through naturalized flora, garden escapes, outcasts to carefully nurtured garden plants.

There is, consequently, no hard definition of what is naturalized and what is not. Examples given here, showing species commonly listed as naturalized that are not, while some common, even dangerous garden escapes are not, should help illustrate this.

Garden escapes can be rare, common, dangerous, crops, trees, shrubs or annual herbs. They may be native (to Australia) or exotic, beautiful or unusual cultivars or relatively uninteresting.

I feel that garden escapes are best defined by having a very limited geographical range (as does Jim Willis), hence they are very vulnerable to extermination within that area. Only careful field surveys can improve our knowledge of what is naturalized, weedy, escaping, persisting in the state. Despite difficulties in identifying this material, one can view some amazing scenes (Easter lillies under Jarrah woodland or a field of Californian Poppies) and new finds are constantly turning up, even in metropolitan Perth.

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Brachycombe 'Purple Splendor': a vastly improved form of this popular Australian plant, exclusive to Thompson and Morgan. It makes a neat and compact mound, with finely cut foliage and 2.5cm to 5cm flowers, violet-blue with black and gold centres. Revels in hot, dry conditions, and a good carpeter or basket plant. (May not be available until September).

Love-in-a-Puff, or Balloon Vine (*Cardiospermum halicacabum*), a self-clinging climber, with feathery foliage that soon becomes smothered with small white flowers later turning into balloon-like seed pods. Will last for several years in a frost-free area, but should be treated as an annual in cold areas.

Portulaca Wildfire; a new type of *Portulaca* that is very suitable for hanging baskets as well as for bedding. 2.5cm flowers of yellow, apricot and rose, on long 30 to 38cm stem; the leaves are broad, flat and waxy-green and make an attractive undercover for the colourful flowers.

Miniature Stardust Flower (*Leptosiphon hybrids*); a dwarf annual from California that is covered throughout summer and autumn with vivid 1cm flowers in shades of yellow, orange, pinks and reds. Ideal for edging, window boxes or rockeries. Is wind resistant and virtually troublefree.

Tassel Flower (*Emilia javanica*); a showy Composite that provides a dazzling display of scarlet, orange and gold flowers. Excellent for cutting, and dries well. Removing spent flower heads keeps the plant blooming over a very long period.

Burning Bush Acapulco Silver (*Kochia tricophylla childsii* 'Acapulco Silver'); an all-America Award winner for 1983. Soft ferny foliage of a brilliant lime green, sprinkled with silver thus a shimmering effect in sunlight. Plants quickly assume a pyramidal habit and can be used as an annual hedge or as dot plants. In autumn they turn to shades of bright ruby-red.



top: 'LOVE-IN-PUFF' (BALLOON VINE)
bottom: TASSEL FLOWER

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Bearded Iris

by Barry Blyth

It is possibly a surprise to most people that there are about 800 new varieties of Iris registered and introduced each year, mainly in America. This has been going on for many years and there are about 500,000 named varieties registered with the American Iris Society. Many are no longer available because they have been superseded but even if 10% are still grown commercially, and that is an educated guess, then the keen Irisarian has about 5,000 varieties he can choose from at commercial gardens throughout America.

Culture for Bearded Iris is fairly straight forward:

1. Full sun.
2. Good drainage.
3. A good friable soil enabling a loose root run.
4. The cooler areas are best suited, cooler in the winter that is. The summer heat does not worry them, in fact it is necessary to have a fair amount of summer sun as this matures the rhizomes and enables them to flower. Cold winters are also essential, preferably with some frosty mornings. This means they do well in all states except in areas such as the coastal strips of Queensland and Northern New South Wales where there are no winter frosts.

Fertilizer requirements are easy. A good dressing of a balanced mix in early spring when new growth is beginning. Then a second dressing in late summer. Not too much nitrogen is advised as this creates excess foliage and not enough bloom.

Keep fresh animal manures well away from the rhizomes as this can cause rot. Best to work it in to a new bed 3 to 4 months before planting.

A side dressing of lime is helpful in winter if your soil is on the acid side. Dolomite lime is possibly best if available.

Planting is best carried out just after blooming, that is late November and December, however they can be planted at any time but flowering is inhibited if planting is made after April.

Watering. On planting a good soaking once a week till established is enough. On established clumps a good soak every 2 to 3 weeks is enough unless heat wave conditions prevail.

Pests and diseases. Aphids and Snails are the main pests and they are easily dealt with in the usual ways. The main diseases are leaf spot and rust. Prevention is the only cure and to date regular sprayings with Plantvax is the only preventative on the market. This is not a real problem and most people who grow Bearded Iris ignore Leaf spot.

Rhizome rot can occur occasionally and is usually due to fungus or bacteria entering the rhizome through an injury. If the problem is found, cut away the infected part and expose the rhizome to the sun to dry it out. Condies crystals or household bleach can also be applied and often control such outbreaks.

In Australia, Iris are becoming more and more popular with many people breeding their own new ones. There are 3 active Iris societies in W.A., Victoria and N.S.W. with about 500 members in all. Monthly meetings are held and annual shows in spring are features to watch out for and attend.



The present is a perpetually prolonged past. The palaces in their overgrown gardens, with pale green trellises dividing rose beds from the blue and white tiled paths, and fountains and fluted basins of Italian marble, all had the same drowsy charm.

Edith Wharton, on Morocco

Natural Swimming Pools.

The 'pool' has become a status symbol of suburban living; even 'room for a pool' adds a dimension to a real estate agent's advertisement. The 'pool-less' household can scarcely be said to have 'made the grade'.

The 'pool' in this context is usually the ultimate in 'non-gardens'. A bright blue rectangle of clear, chlorinated water fills the backyard, it is dutifully surrounded by brick or cobblestone paving and to comply with local regulations is cut off from all else by a forbidding anodised or galvanized fence. No room for lawn, flower beds or shrubbery, it is completely functional and makes no concession to our aesthetic sensibility.

It comes, therefore, as something of a relief to find that one landscape designer, at least, is designing 'natural' swimming pools. Frank Morden, of Park Orchards, Victoria, calls his business just that, 'Natural Swimming Pools'. His creed is simple, that pool and landscape must be designed as one, so that the pool will fit into its surrounding garden and not look like a giant bath tub that has been dropped in as an afterthought. He specialises in the design and construction of 'fully landscaped environmental swimming pools'. The surrounds may be slate, natural stone or weathered timber, the interior may be green, or even brown or a sandy colour which will give the effect of a garden pond; the interior, again, may be of river pebbles with a rock and gravel surround. If the site is sloping there might be a rock embankment with a waterfall; underwater ledges can provide conversation areas, or a large overhanging rock may be used as a seat or a diving board.

With every pool Frank Morden sells, he submits a complete landscape layout, with the pool designed into the total garden setting. Every pool he builds is different, so it is important that filtration and accessories are tailored to suit particular needs.

This is the sensible and the only proper approach to pool building. It is almost impossible to achieve a satisfactory landscape around a pool that already exists, so the most functional, and the only really pleasing results are achieved when pool and landscape are designed as a total concept.

Natural Swimming Pools are at 190 Berrington Road, Park Orchards, Vic., 3114; the telephone number is (03) 876-2326.



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Recommended retail price \$25.00

reviewed by Tim North

Anyone who is contemplating making a garden from scratch, or substantially remodelling an existing one, will learn a great deal from this book, whether the end result is planned as an 'Australian landscape' or not. For it is full of down-to-earth and practical instruction on the basic - and some of the not so basic - techniques of garden construction - rockeries, retaining walls, steps and so on. It tells you - by means of text, diagrams and excellent photographs - what to do if you have to raise the level around established trees, how to make artificial rocks, how to construct a water feature - or a cubby house. It covers courtyard gardens, childrens' gardens, roof gardens, 'mobile' gardens (by which is meant a garden in containers), inner city gardens, lawn substitutes.

As a book of instruction on garden making it is excellent value. The only criticism, if it can be called a criticism, is that it only rather incidentally deals with 'native gardens'. True, most, if not quite all, the plants that are named and illustrated are Australian natives, but the chapter on 'Choosing the right plants', for example, covers only two and a half pages. The authors - and there are few who know more about our native flora than Bill Molyneux and Ross Macdonald - make the opening gambit 'Much is still to be learned and understood about how to use them (i.e. native plants)'. Perhaps they could have elaborated on this a little more, but nonetheless this is a book to be recommended. The two authors have covered a great deal of ground, and they have done so thoroughly, expertly, and in a manner which is very easy to follow.



A Grave Look at History; glimpses of a vanishing form of folk art:

by Lionel Gilbert (John Ferguson, Sydney, 1980)

reviewed by Oline Richards

To quote the publishers 'Graveyards have always been huge storehouses of history, and an essential part of our national heritage. Monuments, through their styles, ornamentations and inscriptions, record and reflect the events, life-styles, beliefs, attitudes and tastes of former generations and our own; they are in fact vast galleries of folk art'.

This is an excellent book, and very readable. It contains many photographs of headstones, grave sculptures, etc. from around Australia. It deals with the social and historical significance of graveyards, and their importance as a source of folk art and the work of skilled and unskilled artisans and craftsmen.

West London Nursery Gardens

by E.J. Willson (Fulham and Hammersmith Historical Society, 56 Palewell Park, London SW14: £5.00)

Most, if not all, of the important nurseries of the seventeenth and eighteenth centuries in England were located in or near London. King's Road, Chelsea, was almost exclusively occupied by nurserymen. The earliest nursery for which records exist is the Brompton Park Nursery, which was founded in 1681 on the site of what is now the Victoria and Albert Museum. This nursery, according to the records, had stock valued at between £30,000 and £40,000 - an enormous sum in those days. This interesting information, and much more, can be found in this book.

Trees and Gardens from the Goldmining Era - a study of the Maldon Landscape;

prepared by the Royal Botanic Gardens, Melbourne

This report was prepared for the Victorian Department of Planning in 1980-81, and is a very comprehensive survey of the planting of this historic goldmining town, its present condition and recommendations for future management. It is well illustrated both with black and white and colour photographs, there are comprehensive appendices listing individual street trees, old plants found in Maldon gardens, and recommended plants. A most valuable report and interesting reading for anyone with an interest in garden history.



A useful source of rare and out-of-print books on garden history, horticulture and landscape architecture is Anchor and Dolphin Books, 20 Franklin Street, P.O. Box 823, Newport, Rhode Island, U.S.A. 02840.

The following is a selection of titles from their latest list (Spring (1983); prices quoted are in US\$ and do not include postage.

Modern Gardens, British and Foreign, by Percy S. Cane (special winter number of 'The Studio', 1926-27) ... \$40.00
Italian Gardens of the Renaissance and other studies by Julia Cartwright, 1914 \$35.00
Californian Gardens, by Winifred Starr Dobyns, 1931 \$35.00
Pot-pourri from a Surrey Garden, by Mrs C.W. Earle, 1897 \$25.00
In a Yorkshire Garden, by Reginald Farrer, 1909 \$50.00
The Gardens of Rome, by Gabriel Faure, 1924 \$70.00
Andre le Notre, Garden Architect to Kings, by Helen M. Fox, 1962 \$40.00
First Garden Book, being a faithful reprint of a most brief and pleasant treatise, teaching how to dress, sow and set a garden by Thomas Hyll Londonyer, 1563 (a reprint of the first garden book published in English, 1939) \$20.00
The Garden Magazine and Register of Rural and Domestic Improvements, by J.C. Loudon, 1828-1837 (7 volumes (incomplete set) in full calf, most in good condition) \$40.00 each
The Villa Taranto, a Scotsman's Garden in Italy, by Neil McEachern (1954) \$20.00



A LUTYENS GARDEN SEAT AT SISSINGHURST CASTLE, KENT, ENGLAND THIS IS ONE OF THE TWO DESIGNS NOW BEING REPRODUCED BY CHARLES VEREY FOR GREEN BROS. - photo Keva North

Two Lutyens Garden Seats.

With the re-issue, after many years, of some of Gertrude Jekyll's books, and the publication of Jane Brown's fascinating book 'Gardens of the Golden Afternoon' interest in the famous Jekyll/Lutyens partnership is running high.

It is good news, therefore, that Lutyens' designs for garden seats have now been revived by the firm that makes the Lister range of garden furniture, Green Bros Ltd. of Hailsham in Sussex, England (see June 1983 issue, page 130), and that these seats will shortly be available in Australia through Malam Pty. Ltd., of Woollahra, N.S.W.

Lutyens designed two garden seats, both of which designs were originally drawn as small sketches, prior to 1913. Many of the Jekyll/Lutyens gardens featured one or other of these seats; one design is illustrated on page 125 of Jane Brown's book, and the seats themselves are pictured in the same book, on page 35 at Munstead Wood, and in colour illustrations 15 and 16 at Folly Farm.

These seats are being made for Green Bros by Charles Verey, son of Rosemary Verey (of 'The Englishwoman's Garden' and 'The Englishman's Garden') as part of a range of exclusive garden furniture, made of prime selected teak. Special features of the range include - traditional mortice and tenon construction, screws concealed with teak plugs, and rounded front seat rails. Charles Verey has carefully researched the designs to ensure authentic reproductions.

Further information on the Charles Verey range, including the Lutyens seats, will be published in 'The Australian Garden Journal' as soon as the range is available in Australia.



The Bookshop of
MARGARETA WEBBER
15 McKillop Street, Melbourne
AUSTRALIA 3000

67 2418

67 2559

THE EDUCATION OF A GARDENER by Russell Page

Long regarded as one of the most important gardening books of the post war period, Education of a Gardener has not been available for some time. This reissue is handsomely presented and will be available in August \$36.00.

DUMBARTON OAKS PUBLICATIONS

Beatrix Farrand's Plant Book for

Dumbarton Oaks	\$39.00	Persian Gardens and Garden Pavillions	\$27.50
Fons Sapientiae - Renaissance Fountains	\$39.50	The Picturesque Garden and Its Influence Outside	
The French Formal Garden	\$25.00	The British Isles	\$47.50
The Islamic Garden	\$39.00	Preservation and Restoration of Historic Gardens	
The Italian Garden	\$42.50	and Landscapes	\$ 6.95

We are in the process of compiling a new list of gardening books. Anybody who is interested but who does not already receive it should write to the above address.

TREES. BE AWARE.



Trees in Australia aren't growing fast – they're going fast. Two hundred years ago, our country had just 15% of its land area under forest cover. Since European settlement, that figure has dropped to less than 5% – and it's still dropping.

The results of tree decline are most evident in country areas where erosion is so highly visible. This was dramatically demonstrated when a recent dust storm through southern New South Wales and Victoria finally deposited about 150,000 tonnes of valuable topsoil into the Tasman Sea. Soil salting is another problem caused by tree loss. Where trees have been removed, salinity occurs because excess rain water is not taken up by trees, but soaks down to the deep underground salty watercourses. This salty water-table then rises, bringing more saline water to the surface where it is concentrated by evaporation. The resultant salt kills protective land cover and



degrades the soil. As a measure of the impact of salinity, the value of production lost through it to one state – Victoria – is estimated at \$10 million a year. The economic value of the use of trees as windbreaks has been too long overlooked. Winds flatten crops, erode soil and increase stress on livestock from heat and cold. Studies have shown that newborn lamb losses are reduced by 50% where tree

shelter is provided and similar reductions in the loss of shorn sheep may also be made. Shelter also affects productivity; in one 5 year study, sheep on sheltered plots produced 35% more wool and 6kg more liveweight than those without shelter. Crop yields too can benefit from the effects of windbreaks.



A large number of studies have shown that net increases around 25% can be achieved by sensibly planting trees as windbreaks in cropping areas. And for the farmer, trees offer the additional uses as fuelwood and as a food reserve during drought times. More trees don't have to mean more fire risk. Well-planned windbreaks and firebreaks – avoiding inflammable species and choosing trees and shrubs which resist flames – and carrying out regular ground clearing can actually aid fire control.

In the city and suburbs too trees have a multitude of benefits – they clean the air that we breathe and release oxygen... they absorb odours, and act as a buffer against noise, dust, heat and wind. Their shade and shelter contribute more than just personal comfort and privacy, as trees conserve energy expended on heating and cooling homes and buildings.

In simplest terms, trees look good – birds sit in them – and kids climb on them... They are a wonderful community resource, and to halt their loss will need the action of the whole community.

This is why Greening Australia has come into being, to provide a focal point for concerted effort from everyone who cares about trees. This organisation, which was fostered by the United Nations Association of Australia, has these simple objectives. To create greater public awareness of the value of trees to the whole community; to halt the disturbing decline of Australia's sparse tree cover; to carry out effectively-planned tree-planting programmes.

Greening Australia is an exciting and meaningful movement that you can get behind. It shows the rising swell of concern, even love, for our land and its trees from every part of the public. It's not just a slogan, but a real force. The sort of force which can bring

countless volunteers to plant over 330 shrubs and trees in a day, in a planned landscape programme for a Sydney suburban community centre.

Greening Australia offers you the opportunity to show that you care. People from all walks of life have already shown their willingness to give up their time to this project. If you can't be one of them, give us whatever support you can. Buying products which carry the Greening Australia logo will help our tree-planting funds.

A greener Australia will be a healthier, more productive and more pleasant place to live. Now it's up to all of us to do what we can, or give what we can, to help in Greening Australia.



TO: Greening Australia, 4th Floor, 347 Riley St., Surry Hills. N.S.W. 2010.

- () Please supply me with more detailed information on Greening Australia.
- () Please enrol me as a subscriber to the Greening Australia newsletter (\$20 p.a.)
- () Please accept my donation of \$..... **

I enclose cheque/money order for \$.....

NAME: _____

ADDRESS: _____

POSTCODE: _____

*** Donations of \$2 and over are tax deductible. Donations of \$100 and over automatically gain a newsletter subscription.





surprisingly inexpensive - a Roman jardiniere from an original at Woburn Abbey, for example, is priced at only \$75, and a Georgian oval basket can be bought for \$80.

Chilstone garden ornaments are available from certain selected retail outlets, and can also be inspected, by appointment only, at 'Whiteley', Oldbury Road, Sutton Forest, N.S.W., 2577. The nineteenth century gardens at 'Whiteley' are at present undergoing careful restoration, and will provide a most fitting setting for these fine garden ornaments. A price list is available on request, and there is also a fully illustrated catalogue. Oldbury Road is just outside Moss Vale, before Sutton Forest, and the phone number for appointments to view is (048) 91-2726.



left: CHILSTONE DORIC TEMPLE (domes can be supplied)

below: CHILSTONE HAREWOOD JARDINIERE, A MID-GEORGIAN DESIGN WITH INTRICATE BASKET WEAVE PATTERN ON THREE LION'S FEET.

Chilstone Garden Ornaments

Chilstone have been making authentic reproductions of classic garden ornaments in England for more than twenty years, and now for the first time these are available in Australia.

Chilstone ornaments are handmade of reconstituted stone by a process which ensures a finished texture that is virtually indistinguishable from natural stone, the colour is similar to that of Sydney sandstone, and the composition of the material is such that it weathers rapidly to give an appearance of age.

The designs used cover all periods and styles, from Romanesque to Victorian Gothic, and each design is cast directly from the original, thus giving complete authenticity of detail.

Almost a hundred different designs are available. They include a Charles II pineapple finial, an Elizabethan handled urn, an Etruscan trough, a William IV classical urn, c.1830, a Doric temple, a Victorian tazza, Pope's urn (designed by William Kent for Pope's garden at Twickenham) and a Longleat urn (also by Kent), gate piers after Christopher Wren and a Wren tulip urn, c.1680 to 1720, a Gothic jardiniere, c.1800, and a mid-Georgian jardiniere of intricate basket-weave, a lion bench seat and a curved Italian bench seat. For a consideration you can even have a Kingston Russell Apollo Pool House, combining exotic Roman design stonework with a superb solar-heated swimming pool!

As all the work is completed by hand, special requirements can be taken into account, and the pieces can be co-ordinated into a complete garden design.

Though some designs are, not unexpectedly, in what may be called the upper price bracket, some of the smaller ones are



Lawn Care Equipment

The appearance of a lawn can make or mar the effect of any garden. Often care and attention is lavished on flower and shrub borders, while the whole effect is ruined by lack of attention to the lawn.

As soon as the grass starts to grow it should be given a top-dressing of screened topsoil. This need not be an arduous task if the right tool is used. A 'Levelawn' will quickly spread heaps of soil placed at intervals by barrow or bucket. If the soil is slightly damp, leave it roughly spread until dry then rub it well into the roots. The job is made easier if the grass is cut short.

If there are any compacted or water-logged areas in the lawn they should be treated first with a hollow-tined corer. This is a far better tool for the purpose than a fork, which tends to compact the soil around the holes and defeat the object. Coring should be done before top-dressing.

Time spent on the lawn now will be amply rewarded by improved appearance and easier maintenance through the summer. The tool mentioned, the Levelawn and the Single Corer Catcher, may be found at good garden centres, or direct from the manufacturers, Better Methods, P.O. Box 226, Sutherland, 2232. Tel: (02) 542-3261.

They cost no more than \$20 to \$25 and will last for years.

Oak Cottage Nursery

John and Ann Stowar started Oak Cottage Nursery, in the N.S.W southern highlands town of Moss Vale, just over a year ago.

John, a landscape designer, had been collecting and grafting maples for some years before that, and the original intention was to have a "maples only" nursery. Their range, however, has extended to all plants suitable for cold climates that have good landscape value. They have many "hard-to-get" varieties, and like to stock a range of drought-tolerant plants - John Stowar says he has been surprised by the drought-tolerance of maples, once they are established. He points out that many of the larger maple species, like *Acer platanoides*, *A. saccharum* and *A. saccharinum* are ideal street trees, especially for broad-scale sub-division.

Oak Cottage Nursery is in Argyle Street, Moss Vale, N.S.W. 2577, Telephone: (048) 91-1792.

**B.M.S. hand tools
make light work of
lawn care.**

**Levelawns from 30"
to 12 ft.
(76cm to 3.66m)**

Turf Barber Edger.

Turf Doctors.

Single Corer Catcher.



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SUTHERLAND, N.S.W. 2232.
Phone: (02) 542-3261**

**AVAILABLE FROM:
Good Garden Centres or direct from manufacturer.**

Plants Wanted . . .

Mrs. D.M. Wallis, RMB401 Miram, Vic. 3415, is seeking bulbs of *Conostylis bealina*. Will anyone who is able to help please get in touch with Mrs. Wallis direct.



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Sharpening a speciality.

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118 — Secateurs, 21 cm and 23 cm



2E — Grafting Bill-Hook, light pattern.



30A — Pruning Knife with budder on top of blade.



Something Special!

8 new releases for the enthusiastic gardener keen to try the latest varieties. Most are recent introductions resulting from extensive breeding programs and are superb examples of the Breeder's Art.

NEW! Geranium Red Fountain F₁

The first hanging basket geranium from seed. Cascading stems covered with brilliant scarlet flowers which cap deeply cut and prettily zoned foliage. Blooms equally well in cool or hot weather.

NEW! Marigold Inca F₁ Mixed

Huge round, fully double flowers in bright clear yellow and rich tangerine orange. Compact plants grow to 35x35cm (14"x14") with 10-12.5cm (4"-5") blooms from only 60 days after sowing.

NEW! Petunia Flag Flying Mix F₁

A brilliant mix of spectacular colours, including salmon orange, sky blue and yellow, star shaped bicolours, white throated and contrastingly veined hybrids. An international mix for an eye-dazzling display.



1 NEW! Salvia Dress Parade Mixed

A compact, dwarf salvia for brilliant colour in either full sun or shade. Superb mixture of traditional scarlet plus new bright colours of rose, pink, purple and white.

2 NEW! Dianthus T & M's Splendour Mixed

A dazzling mix of fringed flowers in superb colours and bicolours cover this long lasting ground cover. Ideal for bedding, edging, rockeries and containers.

3 NEW! Prairie Gentian F₁

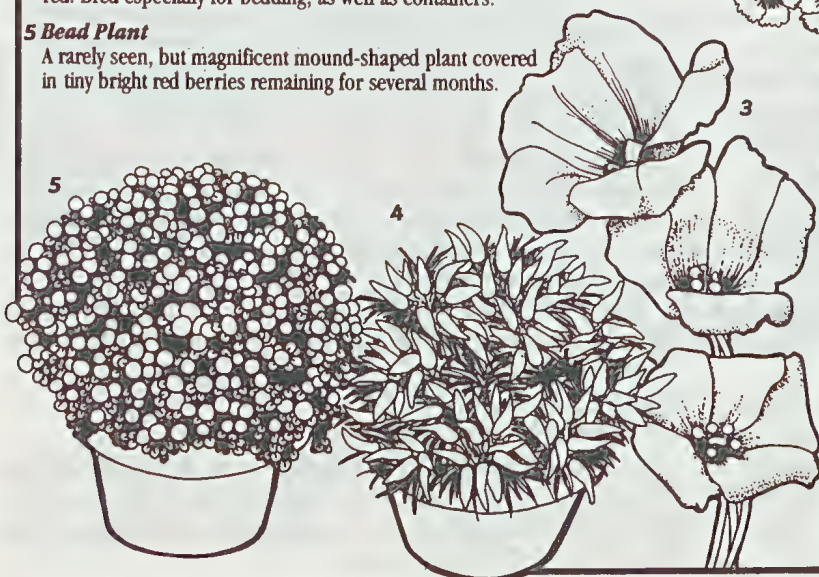
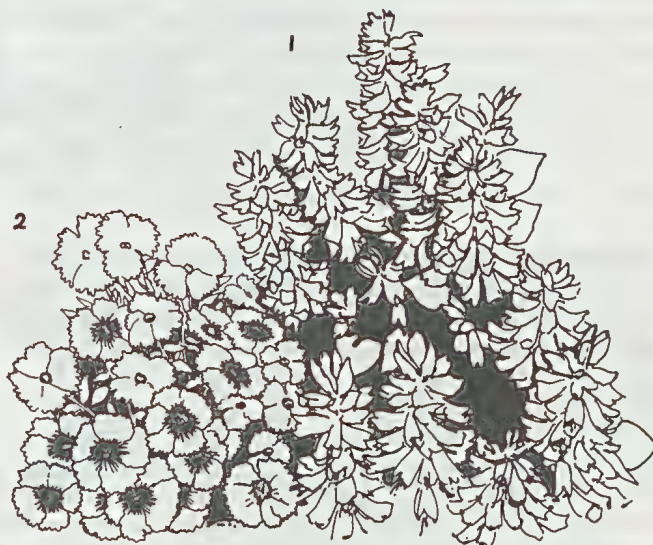
An Entirely new and unique flower. Easy to grow with long lasting 8cm (3") blooms of soft pink, pure white and violet blue. Ideal for cutting.

4 NEW! Ornamental Chili 'Candelight'

This 1983 All America Award Winner is the most free-fruiting yet. Its compact plants smothered in green fruits changing to bright red. Bred especially for bedding, as well as containers.

5 Bead Plant

A rarely seen, but magnificent mound-shaped plant covered in tiny bright red berries remaining for several months.



Thompson & Morgan



The seedsmen

Look for these and many other unusual and exciting seeds on the Thompson & Morgan displays at K-mart, Big-W, major retail stores, nurseries and garden centres.

Please forward full colour catalogue giving full details of all varieties. Enclosed are 5 x 27c stamps.

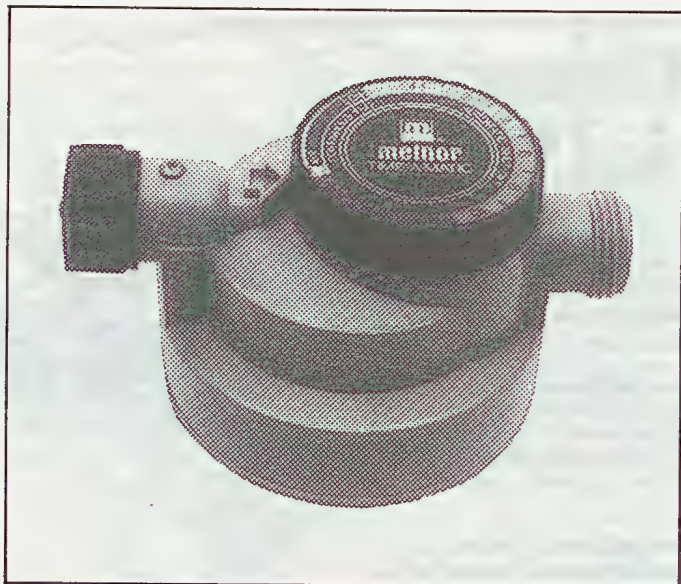
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Address

Post Code

Forward to:-
Erica Vale Australia Pty. Ltd., (Australian distributors for
Thompson & Morgan)
P.O. Box 50, Jannali. N.S.W. 2226 Phone: (02) 533 3693

EV2472/1C



Automatic Garden Sprinklers

Sabco Ltd, who introduced their award-winning timer tap some eighteen months ago, have now joined with Melnor Industries of U.S.A. to introduce a range of 'Time-a-Matic' sprinklers to the Australian market.

There are four sprinklers in the range, a full or part circle pulsating unit, a 2-arm revolving unit, a 3-arm revolving unit, and an oscillating unit. Each has a built-in timer that shuts the sprinkler off when the right amount of water has been delivered, regardless of pressure. They can be adjusted to water an area of up to 88 feet in diameter, and there is a continuous flow function that allows the user to by-pass the automatic control if desired. This flow-through design also allows more than one sprinkler to be connected in series.

Time-a-Matic sprinklers thus save money, because they conserve water, and save time, because they don't have to be watched.

The Melnor range of garden watering equipment now being marketed by Sabco includes almost every kind of watering equipment for lawns, gardens and sports grounds. There are oscillating and revolving sprinklers, travelling sprinklers, pulsating and four-way turret sprinklers, spike sprinklers, rain nozzles, bubble soakers and aqua guns. Sabco is also marketing its own range of garden items, including an automatic fertilizer unit.



Nylex Stripdrain

A huge amount of work will be needed to restore gardens and lawns devastated by the drought. The rebuilding work necessary will also provide the opportunity to install drainage systems to ensure that plants will maintain healthy and vigorous growth in future. Nylex Corporation has introduced 'Stripdrain' - a new garden and agricultural drainage product that will drain excess water from the sub-soil. This makes it ideal for eliminating damp spots in gardens and lawns, protection of house foundations, reducing moisture build-up behind retaining walls and controlling salinity.

Nylex Stripdrain is easy and economical to install. All that is required is a trench about 10cm (4 inches) wide which can be dug with a mechanical trencher or by hand. The Stripdrain is then placed in the excavation without need for expensive gravel, sand or additional filtering material to be added to the trench.

Nylex Stripdrain obtains a number of advantages over conventional drainage tubes because of its unique construction. Stripdrain consists of a deep formed, open plastic core strip which is wrapped with a geotextile fabric cloth cover. Consequently the area of Stripdrain which the water can enter is many times more than that of slotted tube or other material. The non-woven polymer geotextile material is rot proof and has a non-clogging characteristic which will ensure a very long installed life. Nylex Stripdrain has a high tensile strength and joins and junctions are simply made by overlapping the internal core and lapping the external filter cloth over each other and taping together. The high crush strength also prevents damage to Stripdrain during compaction even using road rollers. It is, therefore, ideal for drainage of roadworks, standing areas, tennis courts, golf greens and fairways. In agriculture, it is ideal for drainage of swampy areas and for subsoil salinity control purposes.

Nylex Stripdrain is now being introduced for both the home handyman and contractor markets. A retail carry pack complete with instructions containing a 15 metre length by 100mm Stripdrain is being introduced to garden, hardware and home improvement stores. Commercial sizes and lengths are available on request from Nylex Corporation offices in every State

Blue Mountains Rhododendron Society.

The Blue Mountains Rhododendron Society was founded in 1969 by the Blue Mountains Nurserymen's Association and certain citizens, who felt a need to beautify the mountains. A site was found at Blackheath for development as a parkland type garden, and as a result of an application to the Minister for Lands it was granted to the Society in 1970. Work commenced on the project in 1971.

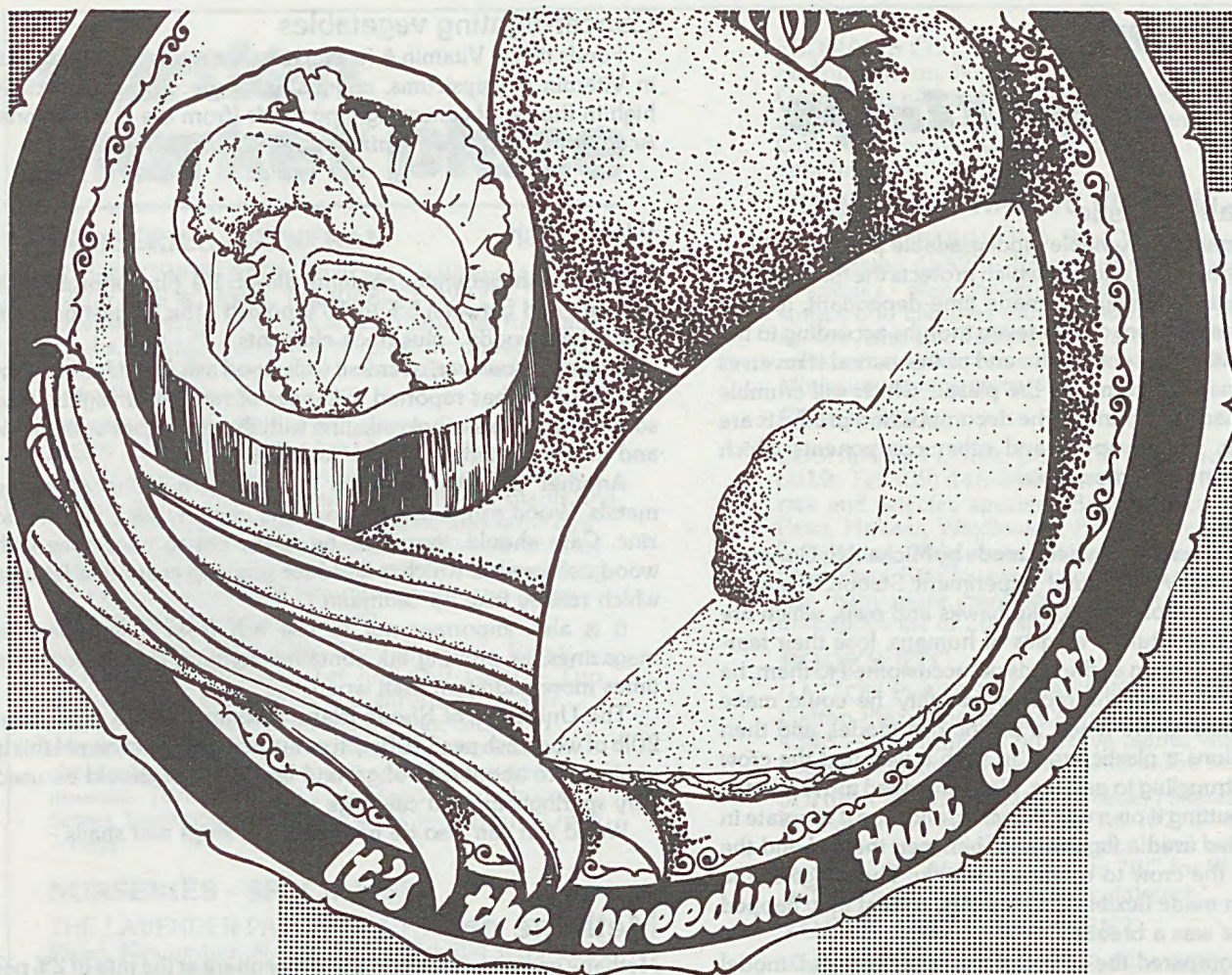
The area consists of 18.5 hectares (45 acres). An area of native flora has been preserved, and in the main valley an attractive lake has been formed, with five ancillary pools. The work of planting all ornamental trees, as well as the azaleas and rhododendrons is carried out mainly by voluntary helpers, and with financial assistance from local organizations. A special scheme now operates whereby donors may contribute \$10 and purchase a rhododendron, the maintenance of which then becomes their responsibility.

The object of the garden is to educate members of the public into the genus *Rhododendron*, as well as to conserve the natural features of the area.

Membership of the Blue Mountains Rhododendron Society costs \$4 per year, or \$7 for a family membership. Subscriptions should be sent to -

Mrs N. Campbell,
15 Warrigal Street, Blackheath, N.S.W., 2785.

Entrance to the garden is from Bacchante Road, Blackheath. The garden is open from 9 a.m. until 5 p.m. This year's Blue Mountains Rhododendron Festival will be held from 12th November until 20th November.



NEW! Dwarf Bean 'Snappy'
(T & M Exclusive)

The best snap bean yet released. A top quality garden variety producing long straight pods on strong erect bushes. Superb flavour, exceptionally fleshy and totally stringless at the edible stage. Snappy has excellent disease tolerance, is suited to virtually all areas and sowing to first picking is only 50-58 days!



NEW! Rockmelon 'Musketee' F1

An outstanding performer! Only 90 days to produce many scrumptious, flavoured melons 14-15cm (5½-6") in diameter on space saving bushes. Ideal for containers.



NEW! Stuffed Tomato 'Striped Cavern'
(T & M exclusive)

Almost a new vegetable, this stuffing tomato has heavily striped thick 'meaty' walls, which do not break down when cooked. Serve this tasty new tomato stuffed fresh in salads or cooked with savoury fillings. Free recipes in every packet!



NEW! Tomato Ultra Boy F1
(T & M exclusive)

The Sandwich Tomato. Heavy yields of large, globe shaped fruit averaging well over 454 gm (1 lb) in weight! Bred for solid, meaty slices with a rich, sweet flavour and crust-to-crust size.



In recent years seed breeders have made huge steps forward in developing new varieties of flowers and vegetables for the benefit of the commercial grower and farmer. However, Thompson & Morgan have directed their research exclusively to the home garden area and many of the seeds offered are very recent introductions often not obtainable elsewhere and with advantages like space saving, vigour, flavour, huge crops, earliness and so on.

Today their laboratories study germination, seedling vigour, optimum seed storage, the potential of new varieties, and many other projects for the future.

Still controlled by the family who took over ownership around the beginning of the century, Thompson & Morgan continue to build up one of the most enviable seedsmen's reputations in the world.

Thompson & Morgan



The Seedsmen.

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Please forward full colour catalogue giving full details of all varieties. Enclosed are 5 x 27c stamps.

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..... P.O. Box 50, Jannali, N.S.W.
..... 2226
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EV2472/1A

garden

cuttings

Biodegradable plastic

The first economically viable biodegradable plastic has been developed in Israel. The additive which protects the film from the degrading effects of sunlight is made time-dependant, its protective action lasting from one to seven months according to the amount of additive present. At the end of this period it reverses itself and begins to decompose the plastic, which will crumble away even if shaded or buried. The decomposition products are carbon dioxide, water vapour and other components which occur naturally in the atmosphere.

Scarecrows

A study of scarecrows has been made by Michael R. Conover, of the Connecticut Agricultural Experiment Station. Knowing that even models of predators, like hawks and owls, which are more effective than stuffed effigies of humans, lose their fear-provoking ability as soon as the birds get accustomed to them, he reasoned that by giving the models 'mobility' he could make them more effective. He made a plastic owl model, and then added to its talons a plastic crow, in such a way that the crow seemed to be struggling to get free. He then added movement to the model by putting it on a weathervane, allowing it to rotate in the wind; he also used a flexible joint between the owl and the crow, allowing the crow to rotate separately. The wings of the crow were then made flexible at two joints, so that they flapped whenever there was a breeze.

Finally he compared the ability of this 'attacking owl' model with that of a stationery owl model, in protecting various garden crops in New Haven from crow damage. The result was that the 'attacking owl' reduced damage to both tomatoes and melons by more than 80%.

African Violets

African Violets potted in tin cans consistently outgrew and outbloomed those in clay, plastic or ceramic pots, in long-term trials by Lorraine Briggs reported in the African Violet Magazine (Journal of the African Violet Society of America).

Lilac City Festival

The Goulburn Lilac City Festival will be held this year from 29th September to 3rd October inclusive.

Plain flower pictures

Plain flowers often have dramatic patterns only seen by insects. Keen photographers can reproduce them without resorting to expensive equipment, according to Arnoldia, the Journal of the Arnold Arboretum.

With standard single lens reflex camera, and a close up lens and flash gun, the only special equipment needed is a filter to remove all but ultra-violet light.

Research in the last century showed that insects see ultra-violet light that is invisible to human eyes.

The plain flowers of marsh marigolds, for example, have large dark spots under UV light that resemble a bullseye for incoming insects.

In some plant species stamens and plant hairs may be ultra-violet beacons for insects.

Cancer-fighting vegetables

Foods rich in Vitamin A (spinach, kale, carrots) and those rich in Vitamin C (capsicums, melons and broccoli) are especially high in the list of cancer-fighting foods (from the U.S. National Academy Study, 'Diet, Nutrition and Cancer').

Wood Ash

Wood ash generally contains about 1% phosphorus, 25% calcium, and between 5% to 10% potash - the highest being in heavy hardwoods - plus trace elements.

One can, however, overdo it with wood ash. The University of Rhode Island has reported instances of neutral or slightly acid soils turned into strongly alkaline with the result that both major and minor nutrients became "locked in".

Another potential problem is an accumulation of heavy metals. Wood ash contains cadmium, copper, lead, nickel and zinc. Care should, therefore, be taken not to over-dose with wood ash ground which is used for growing crops like lettuce, which readily take up cadmium.

It is also important not to use ash from newspapers or magazines, as printing ink contains anything up to twenty-six times more cadmium than wood.

The University of Rhode Island recommends no more than 20lb of wood ash per 1000sq. ft per year; in its effect on pH this is equivalent to about 6 lb of ground limestone. It should be used very sparingly around calcifuge plants.

Wood ash can also be used to deter slugs and snails.

Methane gas

Methane gas is increasing in the atmosphere at the rate of 2% per year, much of it from two sources - termites - of which there are 1,500 pounds for every person on earth - produce vast amounts of it as they digest the debris of tropical forests being cleared for agriculture... and cattle in intensive fattening lots add millions of tons to the air each year via bovine flatulence. The effect is not yet known, but scientists are concerned that the increasing disruption of the balance of gases in the atmosphere will eventually affect the climate of vast areas.

(From "The Avant Gardener", published by Horticultural Data Processors, New York).

Cutting out the blades

A patent for a lawnmower that cuts grass using high pressure water jets has been filed in Birmingham, England. The water is recirculated after cutting, and there are no blades to be damaged or cause damage.

A new vegetable from Yates

Dwarf Sugarsnap Pea, in the Yates packet seed range, is a new variety that is ready for eating about seven weeks after sowing, and may be eaten like a Sugar Pea, pod as well. The pods should be picked while they are young but filled.

The bushes are dwarf but are big producers and bear heavy crops over a long period. The dwarf habit of Dwarf Sugarsnap makes it an ideal pea for small gardens or for growing in containers.

garden market place

NURSERIES - GENERAL

INVERGOWRIE FARM NURSERY, Wilson's Lane, Exeter, N.S.W. 2580. Tel: (048) 83-4277 — Extensive range of exotic and ornamental trees and shrubs, including conifers, maples, rhododendrons and azaleas. Many grafted lines. Tube to advanced sizes. Wholesale only.

SWANE'S NURSERY, 490 Galston Road, Dural, N.S.W. 2158. Tel: (02) 651-1322 — Where nature tends to grow on you! - Suppliers of quality trees, shrubs, roses, fruit trees, seedlings, indoor plants and a comprehensive range of chemicals and fertilizers to home gardeners. Qualified advisory staff on duty 7 days a week from 9 am to 5 pm. - Ample parking, light refreshments and beautiful gardens to make this a delightful nursery to visit.

WIRREANDA NURSERY, 169 Wirreanda Road, Ingleside, N.S.W. 2101. Tel: (02) 450-1400 — Top quality, super value trees and shrubs, ferns and indoor plants direct from the grower. Stunning assortment of Australian natives and exotics to choose from, including many species rare and unusual. Turn off Mona Vale Road at Tumburra Street, Ingleside, and follow signs to Nursery. Open 7 days.

NURSERIES - SPECIALIST

THE LAVENDER PATCH (M & F French), Cullens Road, Kincumber, N.S.W. 2250. Tel: (043) 69-1611 — The Lavender Patch Farm and Nursery specialists in Lavender plants of all kinds - from the 'stillroom' quality dried Lavender and potpourri supplies. Open Saturday, Sunday and Monday only.

RAINBOW RIDGE NURSERY, 8 Taylor's Road, Dural, N.S.W. 2158. Tel: (02) 651-2857 — Iris and Daylilies. Bearded, Louisiana, Japanese Iris, species and water Iris. Tetraploid Day-lilies. Open weekends and by appointment. Visit us at bloom time Oct, Nov and Dec. Turn off Galston Road at Carter's Road, just past Swane's Nursery. Thousands of different Iris and a large rose garden.

ERDMAN'S COTTAGE HERBS, Lot 3 Church St, Bundanoon, N.S.W. 2578. Tel: (048) 83-6465 — Geraniums all varieties, herbs, spices, dried teas, seeds, succulents, old-fashioned perennials. Mail Order list 2 x 27c. Closed Thursdays. Lectures by appointment.

NURSERIES - NATIVE PLANTS

ZODIAC NURSERY, P.O. Box 210, Tolga, North Queensland 4882 — Rainforest plants, wide range of species - Many never before offered. Trees, shrubs and creepers mostly in 50mm tubes grown on the Atherton Tableland, so are quite hardy. Most will survive at least to coastal southern N.S.W. - Minimum order one carton.

SEEDSMEN

BUSHLAND FLORA, Box 118, Scarborough, W.A. 6019. Tel: (09) 446-3446 — W.A. wildflower seeds; rare and selected species - Banksias, Kangaroo Paws, Hakeas, Waxflowers, Feather Flowers, Eucalyptus, Melaleucas, Bottlebrushes, Everlastings, Sturt Peas, Starflowers, Boronias, Leschenaultias, and many more. Send stamped S.A.E. for descriptive list of 200 species.

BOOKS ETC.

GATTON PLAZA NEWSAGENCY & BOOKSHOP, Gatton Plaza Shopping Centre, Gatton, Queensland 4343 — Publications on native plants, wildflowers - Largest selection available. Send a 35c stamp.

JOHIMA BOOKS, Village Arcade, Hillcrest Road, Pennant Hills, N.S.W. 2120. Tel: (02) 84-6576 — Specialist horticultural and agricultural bookshop; from "A" for African Violets to "W" for Weeds. Mail order service. Send SAE for catalogue.

TOOLS AND EQUIPMENT

W.JNO BAKER (HOLDINGS) PTY. LTD. 3rd Floor, Dymock's Building, 428 George Street, Sydney, N.S.W. 2000. Tel: (02) 233-2331 - Wholesale and retail - wide range of top quality 'Kunde' (German) garden tools.

SHOWS AND SOCIETIES

GERANIUM LOVERS, The Australian Geranium Society meets monthly (alternating afternoon and evening). Quarterly journal, specialist library. Sub. \$6 per annum. Further information Membership Secretary, 27 Chichester St, Maroubra, N.S.W. 2035. Telephone (02) 349-2023.

The Botanic Gardens of Adelaide

The Friends of the Botanic Gardens have started a guiding service. The guides, after an initial training course, are offering general walks at the moment, but more specialized tours are being planned. Walks are available at any time of the day, except Sunday afternoons. Bookings may be made by writing to: The Guide Officer, c/- The Botanic Gardens, North Terrace, Adelaide, 5000.

Donations to Botanic Gardens

Until recently, donations to Botanic Gardens, unlike donations to museums and other cultural institutions, had not been tax-deductable.

Happily, following a submission to the former government, this situation has altered, and gifts to Botanic Gardens will in future qualify for deduction under the Income Tax Assessment Act.

Furthermore, the Premier of New South Wales has announced that his government will match all donations to the Royal Botanic Gardens, Sydney, with a \$ for \$ grant.



A Nursery for old-fashioned plants

Wirruna Nursery, at Wallington in Victoria, has been on the same site for over twenty years and can, perhaps, best be described as being what most nurseries are not! They specialise in old-fashioned plants - lavenders, heliotropes, violets, and so on - and stock a great many uncommon plants, like the following:

Cunonia capensis - a South African shrub growing to about 5m, with white flowers in autumn

Stachyurus praecox, from Japan, a shrub to about 4m with reddish-brown shoots and attractive yellow flowers in drooping racemes, flowers in late winter and early spring - leaves colour red in autumn

Bystropogon canariensis, the Canary Island Smoke Bush; grows to about 1m, with tiny smoky lilac flowers in large feathery plumes, and greyish smooth leaves

Eupomatia laurina, the Copper Laurel, a native of the east coast of Australia; grows to about 4m with glossy leaves and greenish-yellow flowers like small double tuberoses; it also produces fig-like fruits which birds love

Hovenia dulcis, the Japanese Raisin Tree, which grows to about 7m; large heart-shaped leaves and small whitish flowers - the stalks contain a sweet red pulp.

As well as old-fashioned and unusual plants, Wirruna Nursery likes to provide good, old-fashioned service. You will find them at Ocean Grove Road, Wallington, Victoria 3221.



**THE
FRAGRANT GARDEN**
Portsmouth Rd., Erina 2250

Old-fashioned romantic plants, lavenders, violets, scented leafed geraniums, fragrant ground covers, climbers and herbs (over 700 varieties).

Charming gallery, books, dainty sachets, exquisite gifts, flower fairies, pot pourri supplies, dried lavender and fragrant oils.

Gallery, Gardens & Nursery **ADMISSION FREE**
Open daily 10 a.m. — 5 p.m.

Mail Order Catalogue, 40 pages \$2.00.

Baked lamb with Lavender stuffing

Boned leg of Lamb.

Make stuffing with 1½ cups brown breadcrumbs, 1 small onion chopped, 1 teaspoon grated lemon rind, ¼ teaspoon mixed herbs, 1 dessertspoon chopped fresh lavender flowers and leaves (English). If using dried lavender 1 teaspoon only, 1 egg yolk, ½ teaspoon salt and water to bind.

Bake in covered pan sharply at 220 c for 30 minutes, reduce to 190 c for the next hour of cooking time, removing cover for the last 20 minutes.

P.S.

Delicious hot with gravy made from pan juices, buttered zucchini and jacket potatoes. Also a delightful addition to a cold 'smorgasbord' served sliced on a bed of mauve coloured aspic.

(from 'The Lavender Patch')

Extracts from letters

To The Editor,

Dear Sir,

I was interested in the paragraph in your April issue about the American practice of pronouncing herb as erb.

Some forty years ago I had a summer vacation job in a garden centre at Stockbridge, Massachusetts. One of my duties was to conduct visitors round the centre's very fine herb garden. Not wishing to embarrass my employers, I learned to say erb. One explanation given me of the mute 'h' was that when the grand estates in the Berkshires were designed, it was fashionable to import, along with sculpture from Italy and France, gardeners from England. The English gardeners said erb and the local people accepted this pronunciation as the correct one. What the custom is now I do not know, since I understand that many of the large places are no longer privately owned and the older generation of gardeners has no doubt long since vanished.

Yours sincerely,

Nancy Grasby, Kalamunda, W.A.



The Mount Macedon Horticultural Society is in need of donations, either of money or books, to replace their Library, which for the second time in eight years was totally destroyed by fire. Donations, large or small, will be gratefully received by the Honorary Secretary, Mrs Cherie Bolderston, 'Lambard', Sangsters Road, Mount Macedon, Victoria, 3441 (telephone: (054) 26 1595).



The new garden grasps us by the arms and legs and drags us to its service, thrilling us by its need of us, at once challenging and imploring us to rescue it from its rawness, crudity, its outlaw state, and offers us by way of compensation - adventure.

Louise Beebe Wilder,

Adventures in my garden and rock garden, 1925

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